

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0992
CALIBRATION DATE: 10-Feb-14

SBE 39 PRESSURE CALIBRATION DATA
508 psia S/N 1345

COEFFICIENTS:

PA0 = 1.358060e+000
PA1 = 2.408374e-002
PA2 = 1.509177e-009
PTHA0 = -6.214497e+001
PTHA1 = 5.099375e-002
PTHA2 = -7.108382e-008

PTCA0 = -6.690124e-001
PTCA1 = 3.526508e+000
PTCA2 = -4.353324e-002
PTCB0 = 2.499963e+001
PTCB1 = -6.750000e-004
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.62	606.3	1652.0	14.63	0.00
104.89	4350.3	1659.0	104.86	-0.01
204.90	8497.2	1661.0	204.87	-0.00
304.90	12642.1	1661.0	304.89	-0.00
404.91	16784.5	1661.0	404.90	-0.00
504.92	20924.7	1662.0	504.90	-0.00
404.91	16786.1	1662.0	404.94	0.00
304.92	12644.2	1662.0	304.94	0.00
204.91	8499.5	1662.0	204.93	0.00
104.91	4352.6	1662.0	104.91	0.00
14.62	606.8	1661.0	14.62	0.00

THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	1191.30	553.30
4.50	1309.10	587.16
11.50	1447.00	600.91
18.50	1585.00	613.71
25.50	1723.00	625.69
32.50	1860.80	637.32

TEMP (ITS90)	SPAN (mV)
-5.00	25.00
35.00	24.98

$$y = \text{thermistor output}; t = P_{\text{TEMPA0}} + P_{\text{TEMPA1}} * y + P_{\text{TEMPA2}} * y^2$$

$$x = \text{pressure output} - P_{\text{TCA0}} - P_{\text{TCA1}} * t - P_{\text{TCA2}} * t^2$$

$$n = x * P_{\text{TCB0}} / (P_{\text{TCB0}} + P_{\text{TCB1}} * t + P_{\text{TCB2}} * t^2)$$

$$\text{pressure (psia)} = P_{\text{A0}} + P_{\text{A1}} * n + P_{\text{A2}} * n^2$$

Date, Avg Delta P %FS

10-Feb-14 -0.00

