

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0991
CALIBRATION DATE: 10-Oct-16

SBE 39 PRESSURE CALIBRATION DATA
508 psia S/N 1344

COEFFICIENTS:

PA0 =	2.866211e-001	PTCA0 =	4.821406e+001
PA1 =	2.396208e-002	PTCA1 =	8.106384e-001
PA2 =	2.546832e-009	PTCA2 =	-1.189633e-002
PTHA0 =	-6.117083e+001	PTCB0 =	2.516038e+001
PTHA1 =	5.030822e-002	PTCB1 =	6.750000e-004
PTHA2 =	-2.008162e-008	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (counts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (counts)	INSTRUMENT OUTPUT (counts)
14.64	658.2	1647.0	14.61	-0.01	-1.50	1186.70	647.30
104.70	4420.1	1661.0	104.74	0.01	1.00	1236.30	649.77
204.71	8587.1	1664.0	204.67	-0.01	4.50	1306.00	652.39
304.71	12752.4	1666.0	304.64	-0.01	8.00	1375.90	654.83
404.71	16916.6	1666.0	404.67	-0.01	11.50	1445.40	656.39
504.72	21078.3	1666.0	504.74	0.00	15.00	1514.90	658.04
404.71	16918.8	1666.0	404.73	0.00	18.50	1584.60	659.74
304.72	12755.5	1666.0	304.71	-0.00	22.00	1654.40	661.07
204.72	8590.1	1666.0	204.74	0.00	25.50	1723.90	661.56
104.72	4421.9	1666.0	104.78	0.01	29.00	1793.60	662.38
14.64	658.8	1666.0	14.62	-0.00	32.50	1863.40	662.64

TEMPERATURE (°C)	SPAN (mV)
-5.00	25.16
35.00	25.18

y = thermistor output (counts)

$$t = PTHA0 + PTHA1 * y + PTHA2 * y^2$$

$$x = \text{instrument output} - PTCA0 - PTCA1 * t - PTCA2 * t^2$$

$$n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$$

$$\text{pressure (PSIA)} = PA0 + PA1 * n + PA2 * n^2$$

$$\text{Residual (\%FSR)} = (\text{computed pressure} - \text{true pressure}) * 100 / \text{Full Scale Range}$$

Date, Offset (%FSR)

● 10-Oct-16 0.00

