

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0043
CALIBRATION DATE: 17-Jan-12

SBE 49 PRESSURE CALIBRATION DATA
508 psia S/N 2013

COEFFICIENTS:

PA0 = 9.178119e-002
PA1 = 1.560264e-003
PA2 = 7.976077e-012
PTEMPA0 = -7.850884e+001
PTEMPA1 = 5.419887e+001
PTEMPA2 = -1.421706e+000

PTCA0 = 5.251883e+005
PTCA1 = 7.204239e+000
PTCA2 = -1.911356e-001
PTCB0 = 2.492563e+001
PTCB1 = 7.250000e-004
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.51	534490.0	1.9	14.49	-0.00
104.74	592350.0	1.9	104.75	0.00
204.77	656419.0	2.0	204.75	-0.00
304.78	720446.0	2.0	304.75	-0.00
404.76	784429.0	2.0	404.75	-0.00
504.75	848372.0	2.0	504.75	0.00
404.77	784449.0	2.0	404.78	0.00
304.79	720472.0	2.0	304.79	0.00
204.81	656459.0	2.0	204.81	0.00
104.78	592396.0	2.0	104.82	0.01
14.51	534495.0	2.0	14.50	-0.00

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	2.17	535432.14
29.00	2.10	535447.78
24.00	2.00	535462.60
18.50	1.88	535466.93
15.00	1.81	535465.84
4.50	1.60	535427.58
1.00	1.53	535407.17
TEMP (ITS90)		SPAN (mV)
-5.00		24.92
35.00		24.95

$$y = \text{thermistor output}; t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$$

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

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

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

Date, Avg Delta P %FS

17-Jan-12 0.00

