

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 9309
CALIBRATION DATE: 28-Sep-15

SBE 37 V2 PRESSURE CALIBRATION DATA
FSR: 870 psia S/N 3270608

COEFFICIENTS:

PA0 = 1.868738e-001
PA1 = 2.773901e-003
PA2 = 1.842832e-011
PTempa0 = -5.919593e+001
PTempa1 = 5.502904e-002
PTempa2 = -7.501484e-007

PTCA0 = 5.248223e+005
PTCA1 = 4.360374e+000
PTCA2 = -5.942332e-002
PTCB0 = 2.515675e+001
PTCB1 = -5.000000e-005
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.64	530103.0	1504.0	14.65	0.00
179.91	589651.0	1512.0	179.91	0.00
359.91	654455.0	1513.0	359.91	0.00
539.92	719212.0	1514.0	539.94	0.00
719.92	783906.0	1515.0	719.94	0.00
869.92	837762.0	1515.0	869.90	-0.00
719.95	783909.0	1516.0	719.95	0.00
539.94	719210.0	1519.0	539.93	-0.00
359.94	654460.0	1519.0	359.93	-0.00
179.93	589655.0	1519.0	179.92	-0.00
14.63	530095.0	1519.0	14.62	-0.00

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	1706	530355.00
29.00	1639	530353.34
24.00	1545	530346.01
18.50	1440	530336.25
15.00	1374	530328.61
4.50	1176	530295.08
1.00	1111	530280.15
TEMP (ITS90)		SPAN (mV)
-5.00		25.16
35.00		25.16

$y = \text{thermistor output}; t = P_{\text{Tempa0}} + P_{\text{Tempa1}} * y + P_{\text{Tempa2}} * y^2$

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

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

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

