

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 9017
CALIBRATION DATE: 28-Sep-15

SBE 37 V2 PRESSURE CALIBRATION DATA
FSR: 870 psia S/N 3182129

COEFFICIENTS:

PA0 = 2.045746e-002
PA1 = 2.963686e-003
PA2 = 2.895414e-011
PTempa0 = -7.220950e+001
PTempa1 = 5.038056e-002
PTempa2 = -4.570925e-007

PTCA0 = 5.245458e+005
PTCA1 = 1.817013e+000
PTCA2 = -5.997426e-002
PTCB0 = 2.517350e+001
PTCB1 = 5.000000e-004
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.64	529496.0	1898.0	14.65	0.00
179.91	585244.0	1907.0	179.91	-0.00
359.91	645901.0	1907.0	359.91	0.00
539.92	706490.0	1908.0	539.93	0.00
719.92	767003.0	1909.0	719.94	0.00
869.92	817364.0	1909.0	869.91	-0.00
719.95	767005.0	1910.0	719.94	-0.00
539.94	706493.0	1914.0	539.94	-0.00
359.94	645904.0	1914.0	359.92	-0.00
179.93	585250.0	1914.0	179.92	-0.00
14.63	529486.0	1914.0	14.62	-0.00

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	2119	529692.00
29.00	2047	529698.66
24.00	1944	529706.86
18.50	1831	529709.35
15.00	1759	529709.80
4.50	1544	529703.50
1.00	1473	529698.53
TEMP (ITS90)		SPAN (mV)
-5.00		25.17
35.00		25.19

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

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

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

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

