Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 0041
CALIBRATION DATE: 10-Apr-19

SBE 49 PRESSURE CALIBRATION DATA
508 psia S/N 1987

COEFFICIENTS:

PA0 =   8.150757e-002
PA1 =   1.560963e-003
PA2 =   6.462162e-012
PTEMPA0 = -7.305304e+001
PTEMPA1 = 5.073347e+001
PTEMPA2 = -4.927172e-001

PTCA0 = 5.246687e+005
PTCA1 = 5.898579e+000
PTCA2 = -1.618148e-001
PTCB0 = 2.490013e+001
PTCB1 = 2.250000e-004
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)
14.78	534140.0	1.9	14.78	-0.00
105.05	591952.0	1.9	105.04	-0.00
205.05	655977.0	1.9	205.04	-0.00
305.06	719971.0	1.9	305.05	-0.00
405.07	783933.0	1.9	405.06	-0.00
505.07	847859.0	1.9	505.07	-0.00
405.07	783950.0	1.9	405.09	0.00
305.07	719996.0	1.9	305.09	0.00
205.07	655998.0	1.9	205.07	0.00
105.07	591976.0	1.9	105.07	0.00
14.79	534151.0	1.9	14.80	0.00

THERMAL CORRECTION

TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
32.50	2.12	534851.10
29.00	2.05	534866.95
24.00	1.95	534880.85
18.50	1.84	534884.96
15.00	1.77	534884.05
4.50	1.55	534850.80
1.00	1.48	534839.93

TEMPERATURE (°C)	SPAN
-5.00	24.90
35.00	24.91

y = thermistor output (counts)

$t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$

x = instrument output - $PTCA0 - PTCA1 * t - PTCA2 * t^2$

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

pressure (PSIA) = $PA0 + PA1 * n + PA2 * n^2$

Residual (%FSR) = (computed pressure - true pressure) * 100 / Full Scale Range

Date, Offset (%FSR)

● 10-Apr-19   0.00