



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

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

SENSOR SERIAL NUMBER: 3764
CALIBRATION DATE: 06-Apr-23

SBE 37 PRESSURE CALIBRATION DATA
1450 psia S/N 5753

COEFFICIENTS:

PA0 =	1.411473e-001	PTCA0 =	-2.495312e+002
PA1 =	6.936929e-002	PTCA1 =	2.579110e-001
PA2 =	-3.758285e-009	PTCA2 =	-7.381431e-003
		PTCB0 =	2.462988e+001
		PTCB1 =	1.750000e-004
		PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	TEMPERATURE (°C)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	INSTRUMENT OUTPUT (counts)
14.42	-42.9	22.9	14.33	-0.01	32.50	-29.38
301.75	4101.7	23.0	301.72	-0.00	29.00	-28.51
588.72	8242.7	23.0	588.73	0.00	24.00	-27.99
875.87	12387.4	22.9	875.87	-0.00	18.50	-27.67
1163.02	16533.9	22.9	1163.01	-0.00	15.00	-27.67
1450.16	20682.2	22.9	1450.14	-0.00	4.50	-28.93
1163.10	16535.8	22.8	1163.14	0.00	1.00	-29.61
875.97	12388.8	22.8	875.97	0.00		
588.81	8243.8	22.8	588.81	0.00		
301.71	4101.0	22.8	301.67	-0.00	TEMPERATURE (°C)	SPAN
14.42	-40.0	22.6	14.53	0.01	-5.00	24.63
					35.00	24.64

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

$$n = x * \text{PTCB0} / (\text{PTCB0} + \text{PTCB1} * t + \text{PTCB2} * t^2)$$

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

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

