

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1640
CALIBRATION DATE: 11-Feb-14

SBE 39 PRESSURE CALIBRATION DATA
508 psia S/N 5733

COEFFICIENTS:

PA0 = 9.321330e-002
PA1 = 2.384523e-002
PA2 = 1.547375e-009
PTHA0 = -8.781111e+001
PTHA1 = 4.614918e-002
PTHA2 = -3.735688e-007

PTCA0 = 7.517274e+001
PTCA1 = 4.464531e-001
PTCA2 = -1.224930e-002
PTCB0 = 2.526988e+001
PTCB1 = -2.025000e-003
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.67	689.8	2425.0	14.68	0.00
104.93	4465.4	2426.0	104.90	-0.01
204.94	8649.4	2426.0	204.93	-0.00
304.96	12830.8	2426.0	304.95	-0.00
404.96	17009.3	2426.0	404.95	-0.00
504.97	21185.3	2426.0	504.95	-0.00
404.97	17010.6	2426.0	404.99	0.00
304.97	12832.5	2426.0	304.99	0.00
204.97	8651.2	2426.0	204.97	0.00
104.96	4468.0	2426.0	104.96	-0.00
14.67	689.8	2426.0	14.68	0.00

THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	1899.50	693.90
1.00	1955.40	694.88
4.50	2033.70	695.98
8.00	2112.20	697.10
11.50	2190.90	698.30
15.00	2269.40	698.43
18.50	2348.30	698.64
22.00	2427.10	698.31
25.50	2506.30	697.63
29.00	2585.30	697.25
32.50	2664.40	696.04
TEMP(ITS90)		SPAN(mV)
-5.00		25.28
35.00		25.20

$y = \text{thermistor output}; t = \text{PTHA0} + \text{PTHA1} * y + \text{PTHA2} * y^2$

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

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

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

