

## **SEA-BIRD ELECTRONICS, INC.**

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## Digiquartz Pressure Calibration dP/dT Corrected Coefficients

(Changed coefficients are posted in italics)

Pressure Transducer Serial Number: 131013 Original Calibration Date: 2014-06-19 Date of Correction: 2014-11-14 Installed in: SBE 9Plus S/N 1207

## PRESSURE COEFFICIENTS

<b>C1</b> <b>C2</b> C3	<b>-39996.74</b> <b>4.1230309e-01</b> 1.2433e-02	<i>psia</i> <i>psia/deg C</i> psia/deg C <sup>2</sup>
D1 D2	0.034673 0.0	
<i>T1</i> <i>T2</i> T3 T4 T5	<b>30.453</b> <b>-1.373447e-04</b> 4.2129e-06 2.27721e-09 0e+00	μsec μsec/deg C μsec/deg C <sup>2</sup> μsec/deg C <sup>3</sup>
AD59 Slope	POM = POB = t = 1.0 t = 0.0	

Corrected at Sea-Bird Electronics as per Paroscientific Calibration and Sea-Bird Electronics dP/dT tests. The original calibration from Paroscientific assumes an operating temperature range of 0 to 125 degrees C. dP/dT correction adjusts this operating range to a nominal range of 0 to 22 degrees C. This increases the accuracy of the transducer in this temperature range.

NOTE: Original coefficients from Paroscientific are attached to this form for informational purposes and should not be used.

## CALIBRATION COEFFICIENTS

SERIAL NO : 131013

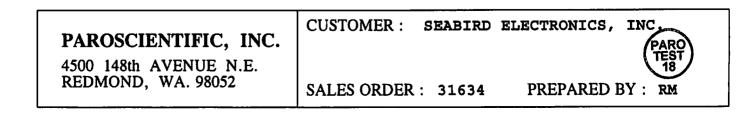
PRESSURE TRANSDUCER

- <sup>1</sup>.

DATE: 06-19-2014

MODEL :	PRESSURE RANGE :	TEMP. RANGE :	PORT :
410K-134	0 to 10000 psia	0 to 125 deg C	

		r		
U = temperature	C <sub>1</sub>	-39995.93	psia	
(deg C)	C <sub>2</sub>	4.52516E-01	psia/deg	C
$C = C_1 + C_2 U + C_3 U^2$	C 3	1.24325E-02	psia/deg	c <sup>2</sup>
$D = D_{1} + D_{2}U$ $T_{0} = T_{1} + T_{2}U + T_{3}U^{2} + T_{4}U^{3} + T_{5}U^{4}$				
	D <sub>1</sub>	0.034673		
	D 2	0		
T = pressure period	T <sub>1</sub>	30.45324	μвес	
T = pressure period (μsec)	T <sub>2</sub>	-1.23114E-04	µsec/deg	С
	T <sub>3</sub>	4.21288E-06	µsec/deg	C <sup>2</sup>
Pressure : (psia)	T <sub>4</sub>	2.27721E-09	µsec/deg	с <sup>3</sup>
$P = C \left( 1 - \frac{T_0^2}{T^2} \right) \left( 1 - D \left( 1 - \frac{T_0^2}{T^2} \right) \right)$	T <sub>5</sub>	0		
			(06-19-20	14)



	0 to 125 deg C	. 100000 000 00 00 00 00 00 00 00 00 00 0	\$10K-13 <del>4</del>	
PORT :	TEMP. RANGE :	PRESSURE RANGE :	WODEC :	
<b>₽</b> Т0Z-6T-9	DATE : 0	PRESSURE TRANSDUCER		
<b>EIOIEI</b> : C	SERIAL NO	CALIBRATION COEFFICIENTS		

PRESSURE COEFFICIENTS AT FIXED TEMPERATURE(only valid at specified temperature)T = pressure period ( $\mu aec$ )Pressure equation : (paia)P = C(1 -  $\frac{T_0^2}{T_0^2})(1 - D(1 - \frac{T_0^2}{T_0^2}))$ Temperature: 21.0 C

		30.45254	(ວອຣາໄ)	1 <sup>0</sup>
		E734E0.0		D
		<b>₽6.0800</b> -	(siaq)	С

(\$702-61-90)

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**BEDWOND'** WA. 98052SALES ORDER : 31634PREPARED BY : RM4500 148th AVENUE N.E.4500 148th AVENUE N.E.4500 148th AVENUE N.E.

SEABIRD ELECTRONICS,

CUSTOMER :