



Calibration Certificate

Pressure Transducer

Certificate Number: 12411M-3
Page 1 of 2 Pages
Issue Date: 2021-11-30
Final Calibration Date: 2021-11-30

Customer: Canadian Light Source Inc.
44 Innovation Blvd.
Saskatoon, SK
S7N 2V3

The Calibration Laboratory Assessment Service (CLAS) of the National Research Council of Canada (NRC) has assessed and certified specific calibration capabilities of this laboratory and traceability to the International System of Units (SI) or to standards acceptable to the CLAS program. This certificate of calibration is issued in accordance with the conditions of certification granted by CLAS and the conditions of accreditation granted by the Standards Council of Canada (SCC). Neither CLAS nor SCC guarantee the accuracy of individual calibrations by accredited laboratories.

The measurement uncertainties for this pressure range is the larger of +/- 0.05% of R or 5 Pa. The uncertainties are expanded using a coverage factor k=2 for a level of confidence of approximately 95%, assuming normal distribution.

CCR Calibration Procedure: QA-118
CLAS certification number: 93-01
SCC accreditation number: 103
Pressure Traceability: DHI 1500276384/1500292882
Voltage Traceability: 1-15301674592-1
Accreditation: ISO 17025

Standard Equipment Used for this Calibration

Voltmeter:	Agilent 34401A	s/n:	MY45024551	Multimeter for voltage measurements
Vacuum:	KJL IG2200	s/n:	5949	Reference pressure measurement
Ref. Std.:	DHI RPM4	s/n:	665	Pressure monitor with 200KPa range
Working Std.:	DHI RPM4	s/n:	566	Pressure monitor with 200KPa range

Customer Unit Identification

Customer Unit: 626B13TBE
Customer specified ID: n/a
s/n: 016526428
Pressure transducer with 1000 torr range

Initial Condition Summary

Equipment Appearance: OK
Sensor Contamination: No visual appearance

Repair Action

Repair Done: None
Calibration Adjustment: Yes

Notes

Calibrated by

Authorized by

Joel Hiscocks, Service Manager

Copyright of this Certificate/Report is owned by the issuing laboratory and may not be reproduced other than in full except with the prior written approval of the issuing laboratory.



PROCESS PRODUCTS

Calibration Certificate Pressure Transducer

Certificate Number: 12411M-3
Page 2 of 2 Pages
Issue Date: 2021-11-30
Final Calibration Date: 2021-11-30

Customer: Canadian Light Source Inc.
44 Innovation Blvd.
Saskatoon, SK
S7N 2V3

Customer Unit Specifications	
Accuracy Specification:	±0.25% of Rdg
Zero Temperature Coefficient:	50 ppm of FS/°C
Span Temperature Coefficient:	400 ppm of Rdg/°C
System Check:	n/a
Sensor Temperature:	n/a
Ref. Press. (torr):	internal absolute

Calibration Conditions	
Ambient Temperature:	23°C ± 5°C
Calibration Gas:	nitrogen
Zero Pressure:	< 1E-6 torr
Customer Unit Display:	voltmeter
Sensor Tube Orientation:	port down

Initial As-Received Calibration Results

Standard		Customer Unit		Customer Unit Error	
Pressure (torr)		Pressure (torr)	Voltage (Volts)	Error (torr)	Error (% of R)
0.000		0.00	0.0000	0.000	-
100.039		99.92	0.9992	-0.119	-0.119%
200.560		200.61	2.0061	0.050	0.025%
300.103		300.49	3.0049	0.387	0.129%
400.072		400.90	4.0090	0.828	0.207%
500.019		501.30	5.0130	1.281	0.256%
602.746		604.39	6.0439	1.644	0.273%
701.052		702.91	7.0291	1.858	0.265%
804.044		805.86	8.0586	1.816	0.226%
901.227		902.63	9.0263	1.403	0.156%
1002.151		1002.74	10.0274	0.589	0.059%

Final As-Shipped Calibration Results

Standard		Customer Unit		Customer Unit Error	
Pressure (torr)		Pressure (torr)	Voltage (Volts)	Error (torr)	Error (% of R)
0.000		0.00	0.0000	0.000	-
100.017		99.83	0.9983	-0.187	-0.187%
201.149		201.09	2.0109	-0.059	-0.029%
300.798		301.02	3.0102	0.222	0.074%
400.744		401.35	4.0135	0.606	0.151%
501.064		502.05	5.0205	0.986	0.197%
600.616		601.87	6.0187	1.254	0.209%
700.873		702.25	7.0225	1.377	0.196%
800.784		802.00	8.0200	1.216	0.152%
903.451		904.15	9.0415	0.699	0.077%
1001.357		1001.13	10.0113	-0.227	-0.023%

The results relate only to the customer unit that is identified in this certificate.