

# CERTIFICATE OF CALIBRATION

CERTIFICATE NUMBER: 208-66797-1

**Calibration of a** : Pressure Transmitter 0-17 bar  
**Manufacturer** : Madincos  
**Model No** : MPT2100-GDT1-06-A-P1  
**Serial No** : 2020 03 12 3816

**Calibrated for** : Control System Technology  
**Address** : 183 Edison Crescent  
Hennopspark  
Centurion

**Issue Date** : 15 May 2020  
**Calibration Date** : 15 May 2020

**Technical Signatory** : D. Vermeulen

**Calibrated by** : J.A. Lopes


The South African National Accreditation System (SANAS) is a member of the International Laboratory Accreditation Co-Operation (ILAC) for the Mutual Recognition Agreement (MRA). The MRA allows for the mutual recognition of technical test and calibration data by the member accreditation bodies worldwide. For more information on the MRA please refer to [www.ilac.org](http://www.ilac.org)

Copyright of this certificate is owned by REPCAL SERVICES. This certificate may not be reproduced other than in full, except with prior written approval of REPCAL SERVICES

The calibration values in the certificate were correct at the time of calibration. The continuous accuracy of the instrument will depend on such factors as the care exercised in handling and use of the instrument and the frequency of use. Re-calibration should be performed after a period which has been chosen to ensure that the item's accuracy remains within the desired limits.

# REPCAL SERVICES

## SANAS ACCREDITED CALIBRATION LABORATORY

---

### 1. LABORATORY STANDARDS AND EQUIPMENT USED FOR MEASUREMENTS

Standards or Equipment	Serial Number	Certificate Number	Calibration Due Date
Pressure Calibrator 70 bar	49755	A1910003	Oct 2020
Beamex Calibrator	602478	208-66211	April 2021

### 2. PROCEDURE / METHOD

2.1 Procedure used: - ELCT 12 , PRESS 01

### 3. REMARKS

#### 3.1 Traceability

The accuracy of the equipment used during calibration is traceable to the National Measuring Standards as maintained in RSA or International Measuring Standards.

#### 3.2. Calibration Environment

The calibration was performed in an environmentally controlled laboratory.

The Temperature was maintained at:  $23^{\circ}\text{C} \pm 3^{\circ}\text{C}$ .

The temperature did not vary more than  $1^{\circ}\text{C}$  per hour at the time of calibration.

The Relative Humidity was maintained between 30%rh and 60%rh at the time of calibration.

#### 3.3. Results

See results in tables below. These results only apply to the Unit Under Test (UUT) calibrated.

#### 3.4. Uncertainties of Measurement

The reported uncertainty of measurements are based on a standard uncertainty multiplied by a coverage factor of  $k = 2$ , which unless specifically stated otherwise, provide a level of confidence of approximately 95 %.

#### 3.5. Condition of the Unit Under Test

The UUT is in good condition.

#### 3.6. Notes

All readings entered on computer directly.

Calibrated with nitrogen.

**REPCAL SERVICES**  
**SANAS ACCREDITED CALIBRATION LABORATORY**

---

**4 RESULTS**

Before Adjustment/as Received

<b>Nominal Applied (bar)</b>	<b>U.U.T Reading up (mA)</b>	<b>U.U.T Reading down (mA)</b>	<b>U.U.T Indication (bar)</b>
0	3.998	4.000	0.000
3	6.821	6.823	3.001
6	9.647	9.649	6.000
9	12.469	12.471	9.000
12	15.292	15.294	12.000
15	18.116	18.118	15.000
17	20.000	20.000	17.000

Uncertainty of measurement:  $\pm 0.074$  bar  
 $\pm 0.004$  mA

<< END OF CERTIFICATE >>