

# CALIBRATION CERTIFICATE

## UNIT UNDER TEST (UUT)

Manufacturer : GE Druck

Part Number : RPS8100-08B-112M5495

Serial Number : 10797448
Pressure Range : 35 to 3500 hPa a
Calibrated Range : 35 to 3500 hPa a
Temperature Range : -55°C to +85°C

Calibration Date : 10 October 2017

Pressure Connector : G1/8 Male 60° Internal Cone

## **ELECTRICAL CONNECTOR**

Electrical Connector : Flying Leads

Red : +ve Supply
Yellow : Frequency
White : -ve Temp Signal
Green : +ve Temp Signal
Blue : -ve Supply
Black : EEPROM

## PERFORMANCE DATA

Max. Error in data : -0.08 hPa

: Spec ±0.35 hPa : 27760.245 Hz

Freq. @ 1000 mbar 25°C : 27760.245 Hz
Frequency Range : 25632 to 32492 Hz
Ave. Pressure Sensitivity : 1.980 Hz/mbar

: Spec 1.143 to 2.857 Hz/mbar

Diode Voltage Range : 418 to 707 mV Nom. Diode Sensitivity : -2.07 mV/°C

: Spec -2.60 to -1.60 mV/°C

## **POLYNOMIAL**

Pressure = 
$$\sum_{i} \sum_{j} K_{ij}.x^{i}.y^{j}$$

for i = 0 to 4, j = 0 to 3

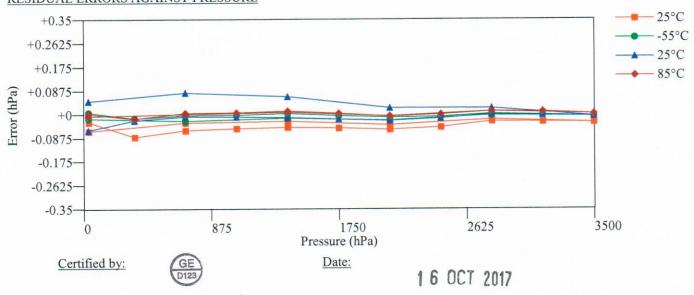
Pressure = hPa

x = Frequency Output (Hz) - X'y = Temperature Signal (mV) - Y'

#### COEFFICIENTS

K00: 1.598332e+003	K10: 5.089537e-001	K20: 1.018826e-005	K30: 8.192382e-011	K40: 1.554858e-015
K01: -1.551760e-001	K11: 4.392519e-006	K21: 3.779324e-011	K31: 3.890464e-015	K41: -2.080178e-018
K02: 1.060367e-004	K12: -1.048677e-008	K22: -2.616210e-013	K32: -4.861845e-017	K42: 1.638909e-020
K03: 2.120299e-007	K13: -2.986125e-011	K23: -9.702796e-016	K33: -4.793117e-019	K43: 1.340565e-022
X': 2.897598e+004	Y': 5.684495e+002			

## RESIDUAL ERRORS AGAINST PRESSURE



#### NOTES

(\*1) Graphs shown are of extreme temperatures and maximum +ve and -ve devations.