

Standards Used

Description	Serial Number	Due-Date
DH INSTRUMENTS PG7202 PISTON GAUGE BASE	xx	
DH INSTRUMENTS AMH-100 MASS SET	xx	

Quality Manuals

This calibration has been completed in accordance with:

- The Fluke Corporate Quality Manual, QSD 111.0, Revision 118, Dated August, 2014 and/or
- The Fluke 17025 Quality Manual, QSD 111.41, Revision 005, Dated Sept. 2014

Test Description

This **FLUKE CALIBRATION 2700G-G20M REFERENCE PRESSURE GAUGE** was inspected on receipt and judged to be suitable for calibration.

At least four hours were allowed for the **2700G-G20M** to thermally stabilize in the calibration laboratory before commencing any test. The pressure transducer was pressurized from its minimum to maximum pressure three times. Each pressure cycle exercises the transducer sensing element and assists in identifying internal leaks before data is collected.

The pressure transducer was zeroed and comparisons were performed throughout the range at specified points with Fluke Calibration working standards. Each applied and test result listed is derived from a multi-measurement data average, only after the pressure is considered to be stable and at equilibrium. Unless otherwise indicated, the horizontal plane of reference for pressure measurement is bottom of the male 1/8" NPT pressure connection.

In the data pages that follow: "**Applied**" is the pressure defined by the reference at equilibrium. "**Test Result**" is the pressure indicated by the **2700G-G20M**. "**Error**" is the absolute error in reported pressure units calculated as (Test Result - Applied). "**Measurement Uncertainty**" is the expanded uncertainty of measurement that corresponds to an approximate coverage probability of 95% and "**Specification**" is the applicable tolerance applied to the data type.

Specifications:

The 2700G-G20M REFERENCE PRESSURE GAUGE has an uncertainty no greater than:

Model	Range	Accuracy ^{1,2}
2700G-BG100K	-15 psi to 15 psi	<p>All Models</p> <p>Positive Pressure: ±(0.02 % of Full Scale)</p> <p>Vacuum: ±(0.05 % of Full Scale)</p>
2700G-BG200K	-15 psi to 30 psi	
2700G-BG700K	-12 psi to 100 psi	
2700G-BG2M	-12 psi to 300 psi	
2700G-BG3.5M	-12 psi to 500 psi	
2700G-BG7M	-12 psi to 1 000 psi	
2700G-G20M	0 to 3 000 psi	
2700G-G35M	0 to 5 000 psi	
2700G-G70M	0 to 10 000 psi	

Adjustment Tolerance³:

Positive Pressure: ±(0.01% of Full Scale)
Vacuum: ±(0.025% of Full Scale)

Notes:

1. One year specification. Full Scale is defined as positive full scale value of the 2700G.
2. Temperature effect: No effect on stated accuracy when operated 18 °C to 28 °C. Add ±0.003% of Full Scale/°C when operated outside of 18 °C to 28 °C.
3. Adjustment tolerance is the As Left specification after adjustment.

If the pressure medium used in the following data tables is not Air or Nitrogen, the 2700G-G20M REFERENCE PRESSURE GAUGE was thoroughly cleaned after calibration and prepared for use with any of the compatible fluids listed for this product. Refer to the 2700G Series Reference Pressure Gauges manual for the listing of compatible fluids.

No statement of compliance with specifications is made or implied on this certificate. If manufacturer's specifications are listed, measured values greater than the manufacturer's specification limits are indicated by 'MV>Spec'.

Applied	Test Result	Error	Measurement Uncertainty	Specification
AS LEFT DATA				
POSITIVE GAUGE PRESSURE VERIFICATION: 2700G-G20M ORIENTATION: HORIZONTAL PRESSURE UNITS: kPa				
0.0 kPa	0 kPa	0.0 kPa	5.8E+002 Pa	2 kPa
4136.7 kPa	4136 kPa	-0.7 kPa	5.9E+002 Pa	2 kPa
8271.5 kPa	8271 kPa	-0.5 kPa	6.2E+002 Pa	2 kPa
12409.5 kPa	12409 kPa	-0.5 kPa	6.7E+002 Pa	2 kPa
16546.1 kPa	16545 kPa	-1.1 kPa	7.3E+002 Pa	2 kPa
20678.6 kPa	20678 kPa	-0.6 kPa	8.1E+002 Pa	2 kPa
16546.1 kPa	16545 kPa	-1.1 kPa	7.3E+002 Pa	2 kPa
12409.5 kPa	12409 kPa	-0.5 kPa	6.7E+002 Pa	2 kPa
8271.5 kPa	8271 kPa	-0.5 kPa	6.2E+002 Pa	2 kPa
4136.7 kPa	4136 kPa	-0.7 kPa	5.9E+002 Pa	2 kPa
0.0 kPa	0 kPa	0.0 kPa	5.8E+002 Pa	2 kPa

Medium used: Nitrogen
Date Tested: 20160425

PRESSURE UNITS: PSI CONVERTED DATA
CONVERSION FACTOR: 1 PSI = 6894.759 Pa

0.00 psi	0.0 psi	0.00 psi	5.8E-002 psi	0.3 psi
599.98 psi	599.9 psi	-0.10 psi	6.0E-002 psi	0.3 psi
1199.68 psi	1199.6 psi	-0.07 psi	6.7E-002 psi	0.3 psi
1799.84 psi	1799.8 psi	-0.07 psi	7.6E-002 psi	0.3 psi
2399.81 psi	2399.6 psi	-0.16 psi	8.7E-002 psi	0.3 psi
2999.17 psi	2999.1 psi	-0.08 psi	1.0E-001 psi	0.3 psi
2399.81 psi	2399.6 psi	-0.16 psi	8.7E-002 psi	0.3 psi
1799.84 psi	1799.8 psi	-0.07 psi	7.6E-002 psi	0.3 psi
1199.68 psi	1199.6 psi	-0.07 psi	6.7E-002 psi	0.3 psi
599.98 psi	599.9 psi	-0.10 psi	6.0E-002 psi	0.3 psi
0.00 psi	0.0 psi	0.00 psi	5.8E-002 psi	0.3 psi

PRESSURE UNITS: BAR CONVERTED DATA
CONVERSION FACTOR: 1 bar = 1E+05 Pa

0.000 bar	0.00 bar	0.000 bar	5.8E-003 bar	0.02 bar
41.367 bar	41.36 bar	-0.007 bar	5.9E-003 bar	0.02 bar
82.715 bar	82.71 bar	-0.005 bar	6.2E-003 bar	0.02 bar
124.095 bar	124.09 bar	-0.005 bar	6.7E-003 bar	0.02 bar
165.461 bar	165.45 bar	-0.011 bar	7.3E-003 bar	0.02 bar
206.786 bar	206.78 bar	-0.006 bar	8.1E-003 bar	0.02 bar
165.461 bar	165.45 bar	-0.011 bar	7.3E-003 bar	0.02 bar
124.095 bar	124.09 bar	-0.005 bar	6.7E-003 bar	0.02 bar
82.715 bar	82.71 bar	-0.005 bar	6.2E-003 bar	0.02 bar
41.367 bar	41.36 bar	-0.007 bar	5.9E-003 bar	0.02 bar
0.000 bar	0.00 bar	0.000 bar	5.8E-003 bar	0.02 bar