

Calibration Condition

Calibration Gas Nitrogen (purity is higher than 99.9 %)

Settings of the Controller are listed below

Accommodation $\sigma =$ *****
 Mole Weight of gas $M =$ *****
 Temperature $T =$ ***** K
 Diameter of Ball $d =$ ***** mm
 Density of Ball $\rho =$ ***** g/cm³
 Viscosity $\mu =$ ***** μ Pa s

Temp. (Equipment ***** °C ± ** °C
Room Temp. ***** °C ± ** °C
Relative Humidity ***** % ± ** %
Power Supply AC / DC ***** V

Calibration Results

Standard (Pa)	Unit Under Calibration (Pa)	Calibration Factor	Relative Expanded Uncertainty
Ps	Pc		Confidence level approximately 95 %
1.5304E-04	1.5496E-04	1.013	1.32%
4.4818E-04	4.5430E-04	1.014	1.53%
9.3270E-04	9.4419E-04	1.012	0.65%
1.4749E-03	1.4916E-03	1.011	1.25%
4.6151E-03	4.6324E-03	1.012	0.98%
9.4155E-03	9.5325E-03	1.012	0.74%
1.5146E-02	1.5334E-02	1.012	0.80%
6.0994E-02	6.1747E-02	1.012	0.98%
1.2790E-01	1.2955E-01	1.012	0.78%
1.1797E-01	1.2955E-01	1.012	0.78%
4.5507E-01	4.5507E-01	1.008	1.20%

- 1) This calibration results was obtained by ** times of calibration.
- 2) Sampling interval : less than 1×10^{-2} Pa 30 sec. , over 1×10^{-2} Pa 10 sec.
- 3) Offset value was subtracted from measured value.
- 4) Average of offset value was ** $\times 10^{-xx}$ Pa.
- 5) The relation, r , between the indicated value of standard , P_s , and the indicated value of Unit Under Calibration , P_c , is as follow,

$$r = P_c / P_s.$$
- 6) The parameter of " TEMP: ***.* K " was not changed. Temperature was compensated by the measured value of calibration chamber.
- 7) The relative uncertainty of calibration is multiplied by the coverage factor of $k=2$ which confidence level lies within approximately 95%.

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