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**Calibration Specification for Capacitance Diaphragm Vacuum
Gauges
(English Translation)**

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3 Terminology and units of measurement (1)

3.1

The term (1)

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Introduction

JJF 1071-2010 "National Calibration Specifications writing rules", JJF 1001-2011 "common terminology and measurement Definitions ", JJF 1059-1" Evaluation and Expression of Uncertainty in Measurement "and GB/T 3163-2007" vacuum technology terms " Together constitute the basic series This specification developed.

The calibration reference specification ISO/T S3567.2011 (E) "vacuum gauge and standard gauge direct alignment Calibration "(Vacuum gauge-Calibrationbydirectcomparison withareferencegauge), ISO/T S27893.2009 (E) "vacuum technology --- vacuum gauge and standard gauge direct comparison calibration results Uncertainty Evaluation "(Vacuumtechnology-Vacuumgauge-Evaluationoftheuncertaintiesof resultsofcalibrationsbydirectcomparisonwithareferencegauge) and "Vacuum Technology Handbook" (HandbookofVacuumTechnology) in Chapter 13, total pressure gauge (TotalPressureVacuum Gauge) and Chapter 15 Calibration and Standards (CalibrationsandStandards) were developed, which uses a Basic principles, methods and techniques for specific indicators were refined, additions and modifications.

The specification for the first time to develop.

Capacitance Diaphragm Gauge calibration specification

1 Scope

This standard applies to the measurement range of the calibration at 0.1Pa ~ 133kPa gauge film capacitors, including the Jedi Capacitance Diaphragm Gauge pressure and differential pressure capacitance diaphragm gauges.

2. References

This specification refers to the following documents.

JJF 1001-2011 common measurement terms and definitions JJF 1008-2008 pressure measurement terminology and definitions GB/T 3163-2007 term vacuum technology GB/T 3164-2007 vacuum technology - Graphical symbols ISO/T S3567.2011 (E) --- vacuum gauge and standard gauge direct comparison calibration (Vacuum gauge-Calibrationbydirectcomparisonwithareferencegauge) ISO/T S27893.2009 (E) Vacuum technology --- vacuum gauge and standard gauge direct comparison calibration Evaluation of Uncertainty (Vacuumtechnology-Vacuumgauge-Evaluationoftheuncertaintiesofresultsofcalibrationsbydirectcomparisonwithareferencegauge) "Vacuum Technology Handbook" (HandbookofVacuumTechnology) Chapter 15 and calibration standard (CalibrationsandStandards) for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 terminology and units of measurement

3.1 Terms

3.1.1 gauge (vacuumgauge) [GB/T 3163-2007 4.1.2 Definition] an instrument measuring the gas pressure below atmospheric pressure or steam pressure.

3.1.2 Capacitance Diaphragm Gauge (capacitancediaphragmvacuumgauge) Displacement of the diaphragm by utilizing pressure differences, resulting in capacitance between the diaphragm and the fixed electrode is changed, by measuring this amount of capacitance change to measure the pressure gauge.

3.1.3 calibration chamber (calibrationchamber) to standard gauge and the instrument to be calibrated to provide a common vacuum chamber vacuum medium.

3.1.4 The bottom pressure (basepressure) [ISO 3567:2011 (E) defined 3.17] Before entering the calibration chamber calibration gas, calibration or backward valve off after some time, the calibration chamber pressure.

NOTE: Do not base pressure and the residual pressure (residualpressure) confused, the latter refers to the indoor calibration can achieve a minimum pressure Force, usually baking results degassing or after prolonged pumping. The bottom pressure may be higher but not lower than the residual pressure.