CDG025D
High Precision Vacuum Gauge
Focused on industrialized applications
The INFICON CDG025D Capacitance Diaphragm Gauge line is designed for stable long time performance in harsh manufacturing environments. The corrosion resistant ultra-pure ceramic sensor provides superior span stability over many years paired with state of the art zero stability. This bonded ceramic structure provides an unprecedented temperature stability over millions of pressure cycles, including atmospheric bursts. Advanced electronics offer the user a wide choice of suitable filters yielding solutions for all applications. A unique sensor shield (patents granted) protects the gauge from undesired process byproducts. For advanced processes, a total Alumina coating immunizes the product against chemical attack.

**Typical applications**
- Load Lock
- Puller, ovens
- Industrial
- Analytical
- PVD, CVD, Etch
- Oxidation
- Sterilization
- Quality control, reference vacuum
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Gauge protection for increased lifetime
- Level 1: Baffle
- Level 3: Bonded ceramic structure
- Level 3: Protective coating

CDG working principle
- Direct pressure measurement by diaphragm
- Capacitance readout
- Electrode

Span stability
Any mounting orientation

Gas type independence

Gauge type
- CDG sensor technology
- Other typical sensor technologies

Digital signal processing
- PVD, CVD, Etch
- Condensation
- Industrial
- Analytical
- Quality control, reference vacuum

One material architecture ensures excellent temperature stability of zero and span.
- Superb compensation of ambient temperature change

Interface I/O
- Classic analog signal 0 ... 10V
- Wide range power supply
- Zero adjust push button
- 2 individual setpoints
- Status LED

Fully ceramic sensor
- Bonded ceramic structure combined with digital signal processing provides superior measurement performance.

Ceramic sensor technology offers superior long-term stability.

Temperature coefficient
- Measured at PTB
- F.S. stability
- Longtime full scale stability
- Measured at PTB

Signal
- ΔC ~ p
- ΔT heat ΔT heat

Time (min)
- 0
- 50
- 100
- 150
- 200
- 250
- 300
- 350
- 400
- 450
- 500

Pressure (mbar)
- True pressure
- Indicated pressure (mbar)

Inficon ceramic sensor
- Standard sensor
- Technology offers superior long-term stability.
CDG025D TEMPERATURE COMPENSATED ADVANTAGES AT A GLANCE

• Unprecedented Full Scale stability
• Environmental independence
• Adaptable sensor integration

Measurement ranges

<table>
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<th>Pressure (Torr)</th>
<th>0.00001</th>
<th>0.0001</th>
<th>0.001</th>
<th>0.01</th>
<th>0.1</th>
<th>1</th>
<th>10</th>
<th>100</th>
<th>1000</th>
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<tr>
<td>Full Scale</td>
<td>0.1</td>
<td>1</td>
<td>10</td>
<td>100</td>
<td>1000</td>
<td></td>
<td></td>
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0.2% Accuracy

Temperature coefficient

In-situ architecture assures an excellent temperature stability of zero and span.
EXCELLENT CUSTOMER SUPPORT IS A COMMITMENT

INFICON provides a global network of sales and service centers. These centers are staffed with local service and application experts who can assist you in choosing the best solution for your individual product application and provide fast support if service is needed.