

SKY[®] CDG025D-X3

Ambient Capacitance Diaphragm Gauge

The INFICON SKY CDG025D Capacitance Diaphragm Gauge line of highly accurate temperature compensated manometers is designed for stable performance in harsh manufacturing tool environments. Advanced digital electronics improve gauge performance and offer easy handling features such as one push button zero function and setpoint adjustment. The corrosion resistant ultra pure ceramic sensor provides excellent zero stability with a long life expectancy of several million pressure cycles, including atmospheric bursts. A unique sensor shielding protects the gauge from process contamination. A robust mechanical design and digital electronics improve EMC compatibility, long term stability and temperature compensation. The CDG025D sets new standards for fast stability after power on and fast recovery from atmospheric pressure exposure.



ADVANTAGES

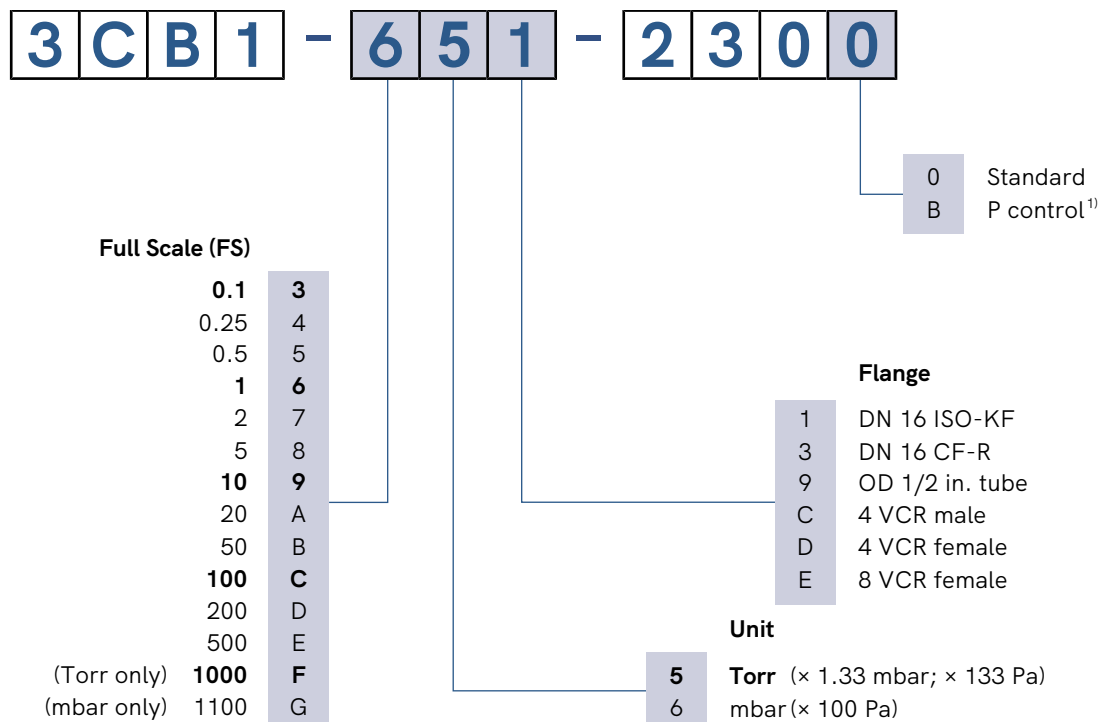
- Full scale (FS) ranges from 100 mTorr ... 1000 Torr
- Fast stability after power on and fast recovery from atmospheric pressure
- Corrosion resistant ceramic sensor
- Excellent long term signal stability
- Temperature compensated
- Sensor double protected from contamination
- One push button zero function
- Wide range power supply
- Two setpoints
- RS232 interface
- Clean room compliant

APPLICATIONS

- Semiconductor manufacturing equipment for Etch, CVD, PVD, ALD
- Data storage and display manufacturing equipment
- Industrial vacuum equipment
- General high accuracy pressure measurement

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ORDERING INFORMATION



1) Optimized signal filter setting for pressure control

bold = standard products

Other flange types on request.

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SPECIFICATIONS

Full scale (FS) Torr / mbar	1000 / 1100 ... 200	100 ... 5	2 ... 0.5	0.25	0.1
Accuracy ¹⁾	0.2 % of reading		0.25 % of reading		0.5 % of reading
Temperature effect					
on zero	0.005 % FS / °C		0.015 % FS / °C		0.02 % FS / °C
on span	0.01 % of reading / °C		0.01 % of reading / °C		0.03 % of reading / °C
Resolution	0.003 % FS				
Pressure, max. (absolute)	400 kPa	260 kPa		130 kPa	
Response time ²⁾	30 ms		130 / 30 ³⁾ ms		
Lowest reading	0.01 % FS				
Lowest suggested					
Reading	0.05 % FS				
Control pressure	0.5 % FS				
Temperature					
Operation (ambient)	+5 ... +50 °C				
Bakeout at flange ⁴⁾	≤110 °C				
Storage	-20 ... +65 °C				
Supply voltage	+14 ... +30 V (dc)				
Power consumption	≤1 W				
Output signal (analog)	0 ... +10 V (dc)				
Degree of protection	IP 30				
Standards					
CE conformity	EN 61000-6-2, EN 61000-6-3, EN 61010, RoHS				
ETL certification	UL 61010-1, CSA 22.2 No.61010-1				
Electrical connection	D-Sub, 15-pin, male				
Setpoint					
Number of setpoints	2 (SP1, SP2)				
Relay contact	30 V (dc) / ≤0.5 A (dc)				
Hysteresis	1 % FS				
Materials exposed to vacuum	ceramics (Al ₂ O ₃), stainless steel (AISI 316L)				
Internal Volume	≤5.1 cm ³				
Weight	285 ... 342 g				

¹⁾ Non-linearity, hysteresis, repeatability at 25°C ambient operating temperature without temperature effects after two hours operation

²⁾ Increase 10 ... 90% FS

³⁾ For pressure control type only

⁴⁾ Non-operation

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DIMENSIONS

mm (inch)

