

Porter[®] CDG020D

Ambient Capacitance Diaphragm Gauge

The INFICON Porter CDG020D Capacitance Diaphragm Gauge is a high quality, cost effective, gas type independent absolute pressure sensor. The Porter is designed for stable long time performance in industrial environments. The ceramic sensor provides excellent span stability over many years of maintenance free operation paired with outstanding zero stability. The corrosion resistant single material sensor architecture guarantees excellent temperature compensation. Fully digital electronics and small footprint defines flexibility in any integration.



ADVANTAGES

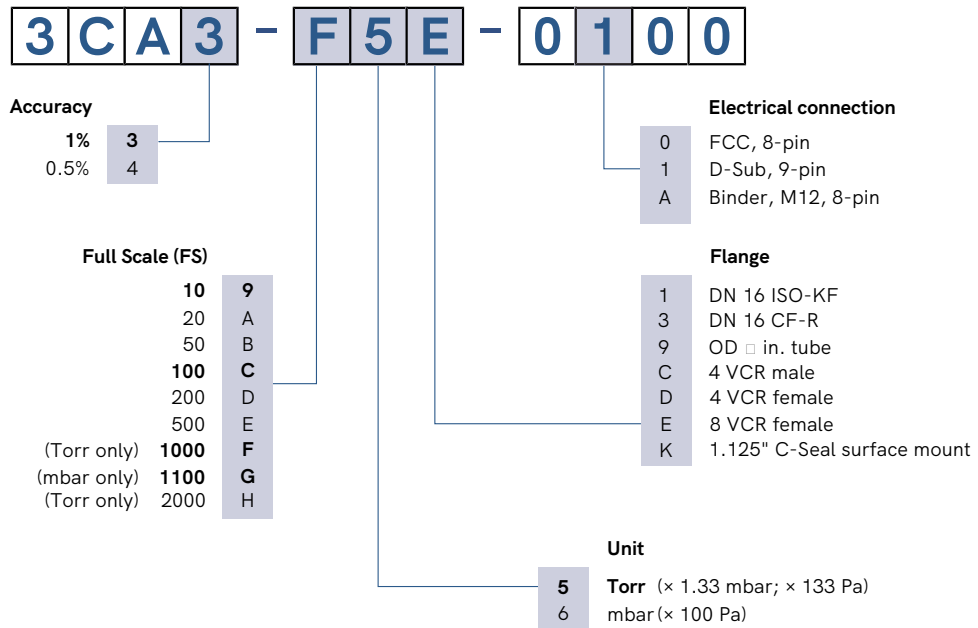
- Excellent span stability - gas type independent
- Corrosion resistant alumina sensor
- Compact, smallest size in it's class
- Easy integration, any mounting orientation
- Digital signal processing
- Maintenance free

APPLICATIONS

- Vacuum coating
- Vacuum monitoring
- Sterilization
- Food and packaging
- Vacuum oven, puller
- Analytical
- Chemical vacuum processes

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ORDERING INFORMATION



bold = standard products

Other flange types on request.

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SPECIFICATIONS

Full scale (FS)	10 ... 2000 Torr / mbar
Accuracy ¹⁾	
3CA3-xxx-xxx	1 % of reading
3CA4-xxx-xxx	0.5 % of reading
Temperature effect	
On zero	0.02 % FS / °C
On span	0.02 % of reading / °C
Resolution	0.05 % FS
Long time stability	0.5 % FS / year
Lowest reading	0.05 % FS
Temperature compensated range	+10 ... +50 °C
Admissible temperature	
Operation (ambient)	0 ... +70 °C
Bakeout at flange ²⁾	≤110 °C
Storage	-20 ... +85 °C
Ambient humidity limits	<80% RH, non-condensing
Supply voltage	
At the gauge	+13 ... +30 V (dc)
Power consumption	≤0.3 W
Output signal (analog)	0 ... +10 V (dc)
Max. output voltage	+10.24 V (dc)
Response time ³⁾	100 ms
Degree of protection	IP 40
Standards	
CE conformity	EMC (EN 61000-6-2, EN 61000-6-3), EN 61010-1 and RoHS
ETL certification	UL 61010-1, CAN/CSA C22.2 No. 61010-1
SEMI compliance	SEMI S2
Electrical connection	
3CAx-xxx-0000	FCC, 8-pin
3CAx-xxx-0100	D-Sub, 9-pin, male
3CAx-xxx-0A00	Binder M12, 8-pin, male
Materials exposed to vacuum	ceramics (Al ₂ O ₃), stainless steel (AISI 316L)
Tightness	<1x10 ⁻⁹ mbar l/s
Mounting orientation	any
Internal volume	≤4.7 cm ³
Weight	80 ... 159 g
Maintenance	none

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

²⁾ Non-operation

³⁾ Increase 10 ... 90% FS

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DIMENSIONS

