

## 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

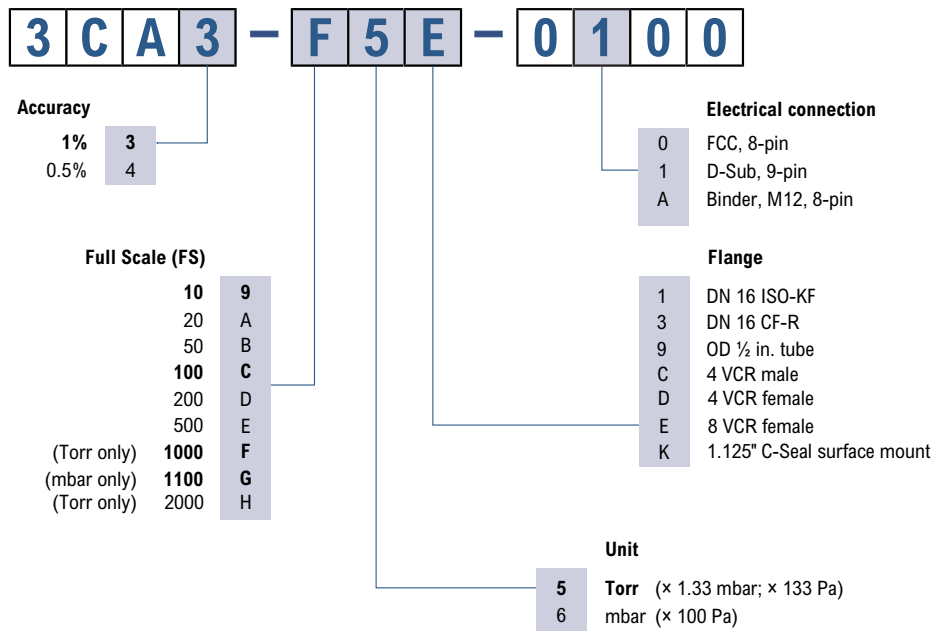
#### APPLICATIONS

- 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

Measurement Range Full scale (FS)	10 ... 2000 Torr / mbar	
Accuracy <sup>1)</sup>		
3CA3-xxx-xxx	% of reading	1
3CA4-xxx-xxx	% of reading	0.5
Temperature effect		
On zero	% FS / °C	0.02
On span	% of reading / °C	0.02
Resolution	% FS	0.05
Long time stability	% FS / year	0.5
Lowest reading	% FS	0.05
Temperature compensated range	°C	+10 ... +50
Admissible temperature		
Operation (ambient)	°C	0 ... +70
Bakeout at flange <sup>2)</sup>	°C	≤110
Storage	°C	-20 ... +85
Ambient humidity limits	% RH	<80%, non-condensing
Supply voltage		
At the gauge	V (dc)	+13 ... +30
Power consumption	W	≤0.3
Output signal (analog)	V (dc)	0 ... +10
Max. output voltage	V (dc)	+10.24
Response time <sup>3)</sup>	ms	100
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 <sub>2</sub> O <sub>3</sub> ), stainless steel (AISI 316L)
Tightness	mbar l/s	<1x10 <sup>-9</sup>
Mounting orientation		any
Internal volume	cm <sup>3</sup>	≤4.7
Weight	g	80 ... 159
Maintenance		none

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

<sup>2)</sup> Non-operation

<sup>3)</sup> Increase 10 ... 90% FS

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## DIMENSIONS

