



Porter™ CDG020D (F.S.R. 10 ... 1000 Torr / mbar)

Porter™ CDG020D - Big Performance, Small Size

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. The Porter vacuum gauge is humble, reliable, always available and never overpaid.

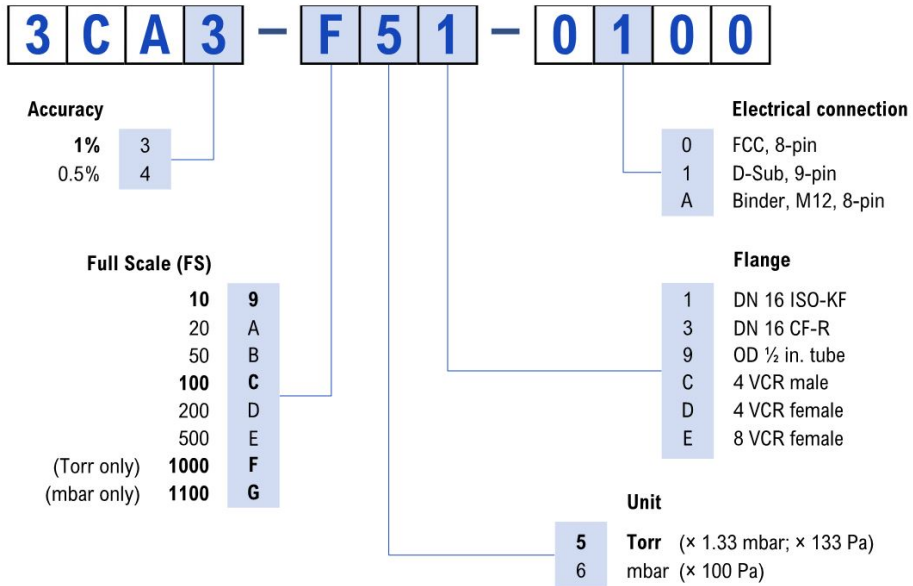


ADVANTAGES

- 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

ORDER INFORMATION

ORDERING INFORMATION



bold = standard products

Other flange types on request.

SPECIFICATIONS

Type		10 ... 1000 Torr / mbar
Accuracy (1)		
3CA3-xxx-xxx	% of reading	1
3CA4-	% of reading	0.5
Temperature effect on zero	percent FS/°C	0.02
Temperature effect on span	% of reading / °C	0.02
Resolution	percent FS	0.05
Long time stability	percent FS/yr.	0.5
Lowest reading	percent FS	0.05
Temperature compensated range	°C	+10 ... +50
Admissible temperature		
Operation (ambient)	°C	0 ... +70
Bakeout at flange (2)	°C	≤110
Storage	°C	-20 ... +85
Ambient humidity limits	percent RH	<80%, non-condensing
Supply voltage	V (dc)	+13 ... +32
Power consumption	W	≤0.3
Output signal (analog)	V (dc)	0 ... +10
Max. output voltage	V (dc)	+10.24
Response time (3)	ms	100
Degree of protection		IP 40
Standards		
CE conformity		EMC (EN 61000-6-2, EN 61000-6-3), EN 61010-1 & 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		Aluminum oxide ceramic (Al ₂ O ₃), stainless steel 1.4404 (AISI 316L)
Tightness	mbar•L/s	<1×10 ⁻⁹
Mounting orientation		any
Internal volume		
1/2" tube	cm ³ (in. ³)	3.6 (0.219)

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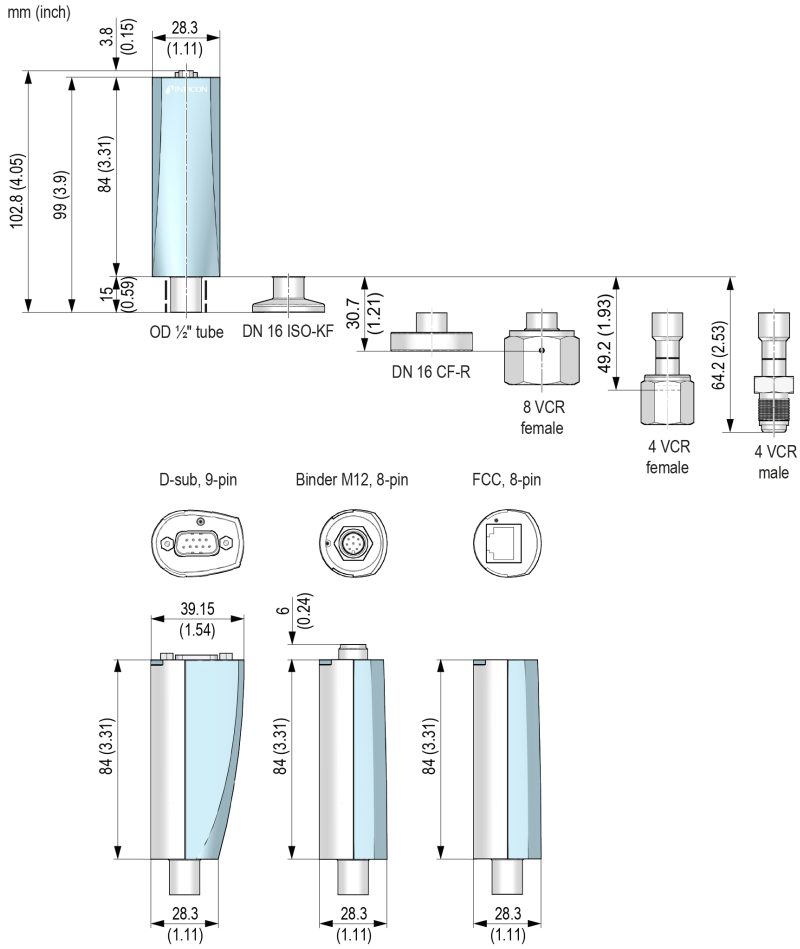
Type		10 ... 1000 Torr / mbar
DN 16 ISO-KF	cm ³ (in. ³)	3.7 (0.226)
DN 16 ISO-CF	cm ³ (in. ³)	5.0 (0.305)
4 VCR male	cm ³ (in. ³)	6.1 (0.372)
4 VCR female	cm ³ (in. ³)	5.6 (0.342)
8 VCR female	cm ³ (in. ³)	5.1 (0.311)
Weight		
1/2" tube	g	~94
DN 16 ISO-KF	g	~110
DN 16 ISO-CF	g	~135
4 VCR male	g	~123
4 VCR female	g	~133
8 VCR female	g	~159
Maintenance		none

(1) Non-linearity, hysteresis, repeatability at 25 °C ambient operating temperature without temperature effects after 2 hours operation.

(2) Non operation

(3) Increase 10 ... 90% percent FS

DIMENSIONS



www.inficon.com reachus@inficon.com

Due to our continuing program of product improvements, specifications are subject to change without notice. RateWatcher is a trademark of INFICON. All other trademarks are the property of their respective owners.

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