

Porter CDG020D 10 ... 1000 Torr / mbar

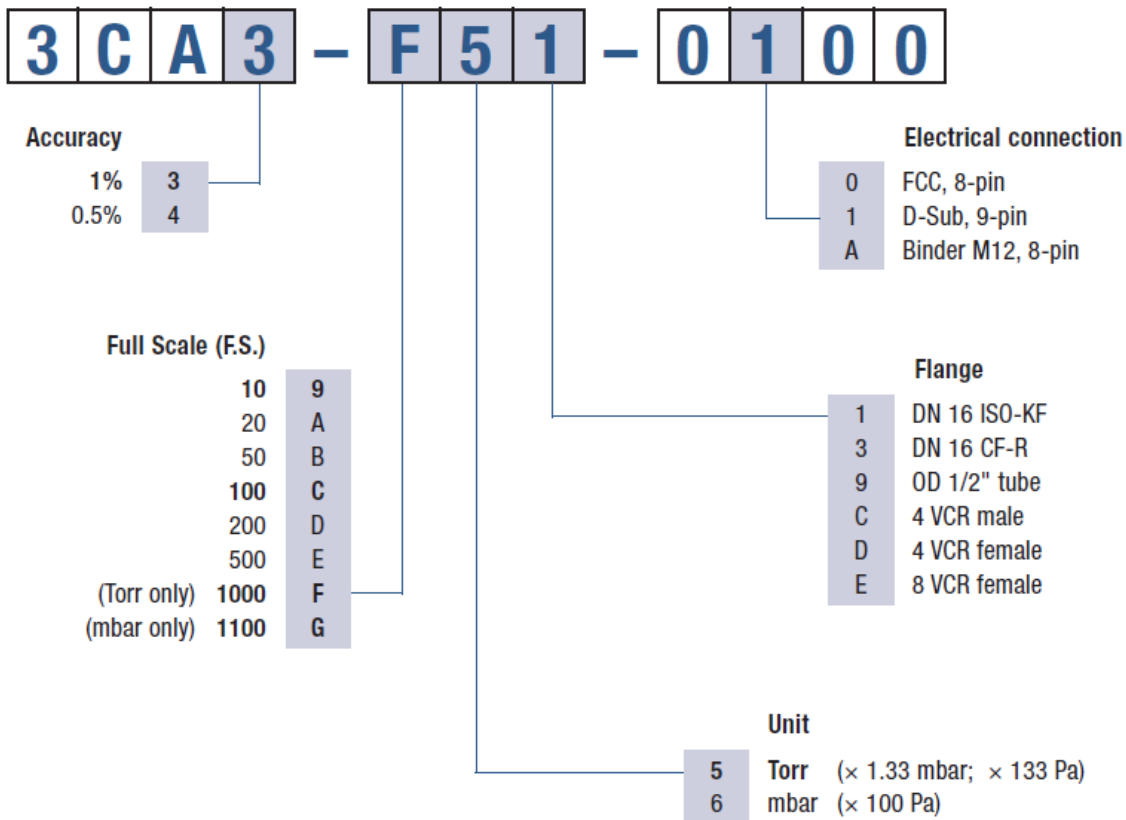
The INFICON Porter CDG020D Capacitance Diaphragm Gauge is a high quality, cost effective, gas type independent absolute pressure sensor. The Porter is designed for stable long time performance in industrial environments. The ceramic sensor provides excellent span stability over many years of maintenance 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.



BENEFITS

- 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

ORDERING INFORMATION



bold = standard products

Other flange types and full scales (F.S.) 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 ... +30 |
| 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 |

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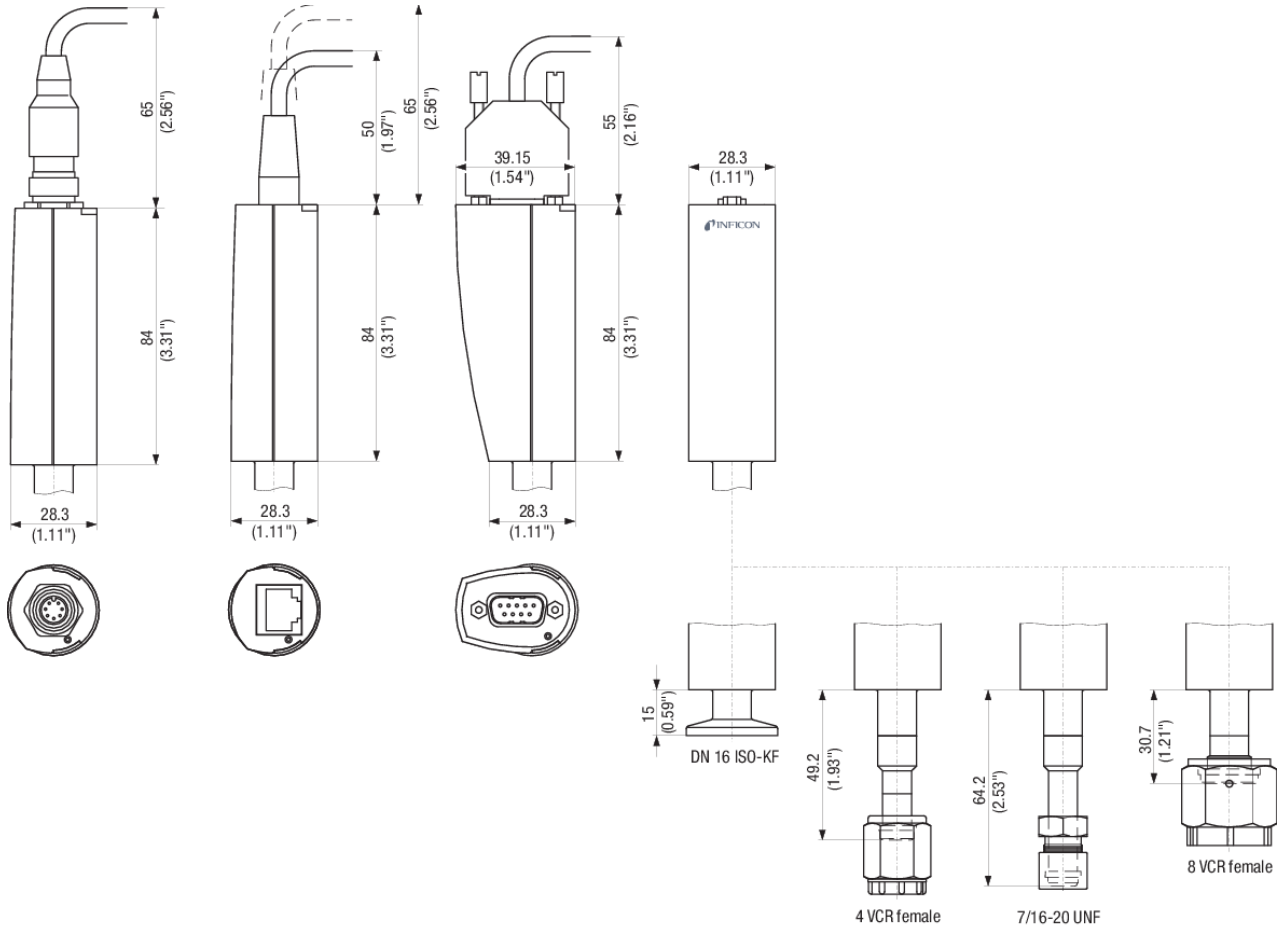
| Type | | 10 ... 1000 Torr / mbar |
|----------------------|-------------------------------------|-------------------------|
| Mounting orientation | | any |
| Internal volume | | |
| DN 16 ISO-KF | cm ³ (in. ³) | 3.7 (0.226) |
| 4 VCR male | cm ³ (in. ³) | 6.1 (0.372) |
| 4 VCR female | cm ³ (in. ³) | 5.6 (0.342) |
| 8 VCR female | cm ³ (in. ³) | 5.1 (0.311) |
| Weight | | |
| DN 16 ISO-KF | g | ~110 |
| 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



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