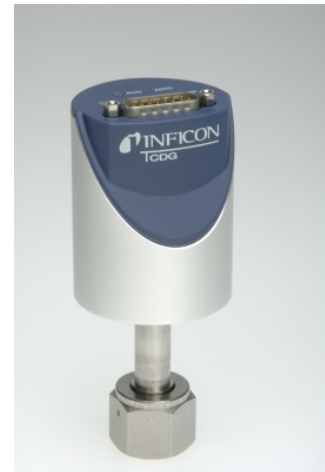


CDG025D mbar based products

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 pushbutton 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 (patent pending) 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.



BENEFITS

- Full scale ranges from 100 mTorr ... 1000 Torr
- Fast stability after power on
- Fast recovery from atmospheric pressure
- Corrosion resistant ceramic sensor
- Excellent long term signal stability
- Temperature compensated
- Sensor protected from contamination
- One pushbutton zero function
- Wide range power supply

SPECIFICATIONS

Type		1000 mbar	100 mbar	10 mbar	1 mbar	0.1 mbar
F.S. (Full Scale)	Torr	–	–	–	–	–
F.S. (Full Scale)	Pa	110,000	10,000	1,000	100	10
F.S. (Full Scale)	mbar	1000	100	10	1	0.1
Accuracy (1)	% of reading	0.2	0.2	0.2	0.2	0.5
Temperature effect						
on zero	percent FS/ °C	0.005	0.005	0.005	0.015	0.02
Temperature effect						
on span	% of reading / °C	0.01	0.01	0.01	0.01	0.03
Resolution	percent FS	400	260	260	260	130
Pressure, max.	kPa (absolute)	0.003	0.003	0.003	0.003	0.003
Response time (2)	ms	30	30	30	30	130
Lowest reading	percent FS	0.01	0.01	0.01	0.01	0.01
Lowest suggested reading	percent FS	0.05	0.05	0.05	0.05	0.05
Lowest suggested control pressure	percent FS	0.5	0.5	0.5	0.5	0.5
Temperature						
Operation (ambient)	°C	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Bakeout at flange (3)	°C	≤110	≤110	≤110	≤110	≤110
Storage	°C	–40 ... +65	–40 ... +65	–40 ... +65	–40 ... +65	–40 ... +65
Supply voltage	V (dc)	+14 ... +30	+14 ... +30	+14 ... +30	+14 ... +30	+14 ... +30
Power consumption	W	≤1	≤1	≤1	≤1	≤1
Output signal (analog)	V (dc)	0 ... +10	0 ... +10	0 ... +10	0 ... +10	0 ... +10
Degree of protection		IP 30	IP 30	IP 30	IP 30	IP 30
Standards		EN 61000-6-2, EN 61000-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, RoHS
Electrical connection		D-sub, 15 pole, male	D-sub, 15 pole, male	D-sub, 15 pole, male	D-sub, 15 pole, male	D-sub, 15 pole, male
Setpoint (SP1,SP2) (4)						
Relay contact	V (dc)	30	30	30	30	30
Setpoint (SP1,SP2) (4)						

SPECIFICATIONS

Type		1000 mbar	100 mbar	10 mbar	1 mbar	0.1 mbar
Relay contact	A (dc)	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Setpoint (SP1,SP2) (4)						
Hysteresis	percent FS	1	1	1	1	1
Materials exposed to vacuum		Aluminum oxide ceramic (Al ₂ O ₃), Vacon 70 ⁵⁾ , stainless steel (AISI 316L ⁶⁾), AgCuTi hard solder, sealing glass	Aluminum oxide ceramic (Al ₂ O ₃), Vacon 70 ⁵⁾ , stainless steel (AISI 316L ⁶⁾), AgCuTi hard solder, sealing glass	Aluminum oxide ceramic (Al ₂ O ₃), Vacon 70 ⁵⁾ , stainless steel (AISI 316L ⁶⁾), AgCuTi hard solder, sealing glass	Aluminum oxide ceramic (Al ₂ O ₃), Vacon 70 ⁵⁾ , stainless steel (AISI 316L ⁶⁾), AgCuTi hard solder, sealing glass	Aluminum oxide ceramic (Al ₂ O ₃), Vacon 70 ⁵⁾ , stainless steel (AISI 316L ⁶⁾), AgCuTi hard solder, sealing glass
Internal volume						
I. volume 1/2" tube	cm ³ (in. ³)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)
I. volume DN 16 ISO KF	cm ³ (in. ³)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)
I. volume DN 16 CF-R	cm ³ (in. ³)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)
I. volume 8 VCR®	cm ³ (in. ³)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)
Weight						
Weight 1/2" tube	g	310	310	310	310	310
Weight DN 16 ISO KF	g	330	330	330	330	330
Weight DN 16 CF-R	g	350	350	350	350	350
Weight 8 VCR®	g	370	370	370	370	370

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

(2) Incease 10 ... 90% F.S.

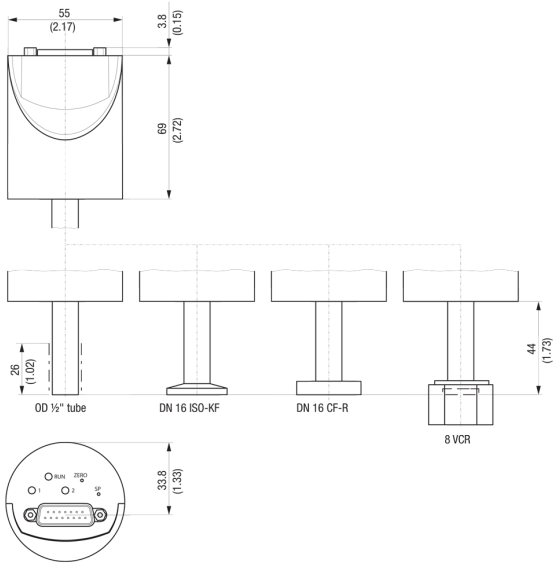
(3) Non operation

(4) CDG025D-S only

(5) 28% Ni, 23% Co, 49% Fe

(6) 18% Cr, 10% Ni, 3% Mo, 69% Fe

DIMENSIONS



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