

SKY® CDG025D 0.1 ... 1000 Torr / mbar

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 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.

The INFICON SKY CDG025D Capacitance Diaphragm Gauges are direct replacements for the Oerlikon Leybold CTR 100 transmitters. Get the original from the manufacturer with global support and solutions for all applications.

CTR 100, 230 300, 230 301, 230 340Vv01, 230 302, 230 303, 230 304V01, 230 305, 230 306, 230 307, 230 308, 230 309 V01, 230 311, 230 312, 230 313, 230 314 V01, 230 315, 230 316, 230 317, 230 318, 230 319 V01

Flange type Full scale INFICON part number old Oerlikon Leybold part number [Torr] CDG025D CTR 100 DN 16 ISO-KF1000 375-001 230 300 100 376-001 230 301 20 383-001 230 340V01 10 377-001 230 302 1 378-001 230 303 0.1 379-001 230 304V01 DN16 CF-R1000 375-002 230 305 100 376-002 230 306 10 377-002 230 307 1 378-002 230 308 0.1 379-002 230 309 V01 Cajon 8 VCR1000 375-003 230 310 100 376-003 230 311 10 377-003 230 312 1 378-003 230 313 0.1 379-003 230 314 V01 1/2" tube 1000 375-000 230 315 100 376-000 230 316 10 377-000 230 317 1 378-000 230 318 0.1 379-000 230 319 V01



BENEFITS

- Fully compatible with CTR 100 transmitters
- 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

ORDER INFORMATION

Type		1000 Torr / 1100 mbar
CDG025D	0.1 Torr; 1/2"tube	379-000
CDG025D	0.1 Torr; 8-VCR	379-003
CDG025D	0.1 Torr; DN16CF-R	379-002
CDG025D	0.1 Torr; DN16ISO-KF	379-001
CDG025D	1 Torr; 1/2"tube	378-000
CDG025D	1 Torr; 8-VCR	378-003
CDG025D	1 Torr; DN16CF-R	378-002
CDG025D	1 Torr; DN16ISO-KF	378-001
CDG025D	1`000 Torr; 1/2"tube	375-000
CDG025D	1`000 Torr; DN16CF-R	375-002
CDG025D	1`000 Torr; DN16ISO-KF	375-001
CDG025D	10 Torr; 1/2"tube	377-000
CDG025D	10 Torr; 8-VCR	377-003
CDG025D	10 Torr; DN16CF-R	377-002
CDG025D	10 Torr; DN16ISO-KF	377-001
CDG025D	100 Torr; 1/2"tube	376-000
CDG025D	100 Torr; 8-VCR	376-003
CDG025D	100 Torr; DN16CF-R	376-002
CDG025D	100 Torr; DN16ISO-KF	376-001
CDG025D	1000 Torr; 8-VCR	375-003
CDG025D	20 Torr; DN16ISO-KF	383-001

SPECIFICATIONS

Type		1000 Torr / 1100 mbar	500 ... 10 Torr / mbar	1 Torr / mbar	0.25 Torr	0.1 Torr / mbar
Setpoint (4)						
Relay contact	V (dc)		30	30	30	30
Setpoint (4)						
Relay contact	A (dc)		≤0.5	≤0.5	≤0.5	≤0.5
Setpoint (4)						
Number of setpoints			2 (SP1,SP2)	2 (SP1,SP2)	2 (SP1,SP2)	2 (SP1,SP2)
Setpoint (4)						
Hysteresis	percent FS		1	1	1	1
Accuracy (1)	% of reading	0.2	0.2	0.2	0.25	0.5

SPECIFICATIONS

Type		1000 Torr / 1100 mbar	500 ... 10 Torr / mbar	1 Torr / mbar	0.25 Torr	0.1 Torr / mbar
Temperature effect						
on zero	percent FS/ °C	0.005	0.005	0.015	0.02	0.02
Temperature effect						
on span	% of reading / °C	0.01	0.01	0.01	0.03	0.03
Resolution	percent FS	0.003	0.003	0.003	0.003	0.003
Pressure, max.	kPa (absolute)	400	260	260	130	130
Response time (2)	ms	30	30	30	130	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						
CE conformity		EN 61000-6-2, EN 61000-6-3, EN 61010 & RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010 & RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010 & RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010 & RoHS	EN 61000-6-2, EN 61000-6-3, EN 61010 & RoHS
ETL certification		UL 61010-1, CSA 22.2 No.61010-1	UL 61010-1, CSA 22.2 No.61010-1	UL 61010-1, CSA 22.2 No.61010-1	UL 61010-1, CSA 22.2 No.61010-1	UL 61010-1, CSA 22.2 No.61010-1
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

SPECIFICATIONS

Type		1000 Torr / 1100 mbar	500 ... 10 Torr / mbar	1 Torr / mbar	0.25 Torr	0.1 Torr / mbar
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)
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)
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)
I. volume 8 VCR®	cm ³ (in. ³)		3.6 (0.22)	3.6 (0.22)	3.6 (0.22)	3.6 (0.22)
1/2" tube	cm ³ (in. ³)	3.6 (0.22)				
DN 16 ISO KF	cm ³ (in. ³)	3.6 (0.22)				
DN 16 CF-R	cm ³ (in. ³)	3.6 (0.22)				
8 VCR®	cm ³ (in. ³)	3.6 (0.22)				
Weight						
Weight 1/2" tube	g		310	310	310	310
Weight DN 16 ISO KF	g		330	330	330	330
Weight DN 16 CF-R	g		350	350	350	350
Weight 8 VCR®	g		370	370	370	370
1/2" tube	g	310				
DN 16 ISO KF	g	330				
DN 16 CF-R	g	350				
8 VCR®	g	370				

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

(2) Increase 10 ... 90 percent FS

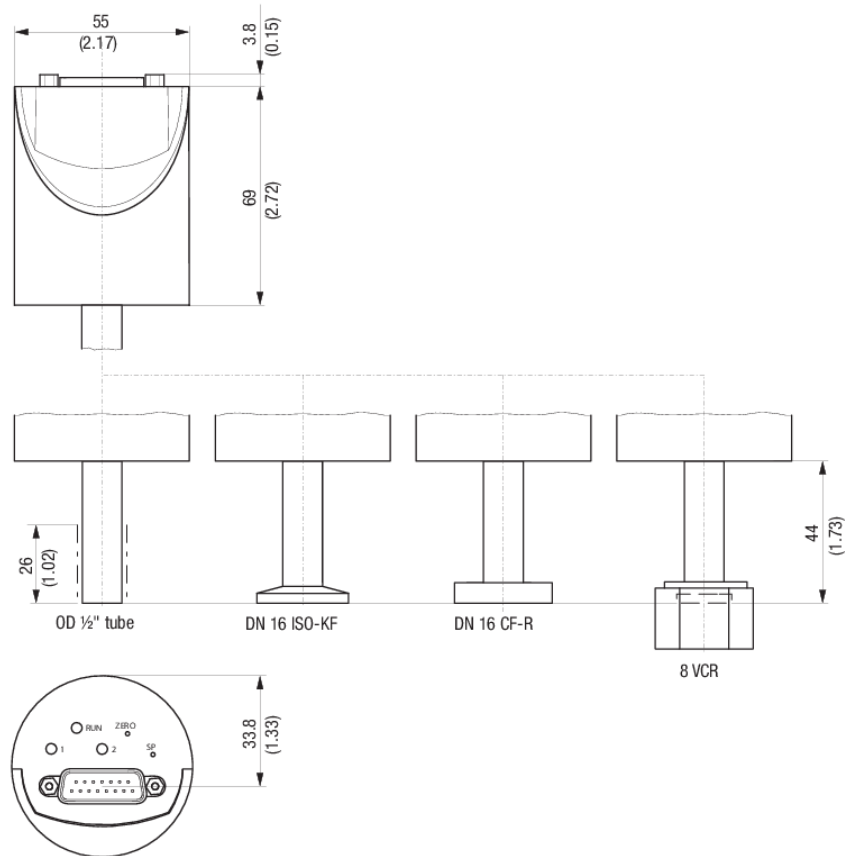
(3) Non operation

(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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