

CDG045D Torr based other ranges

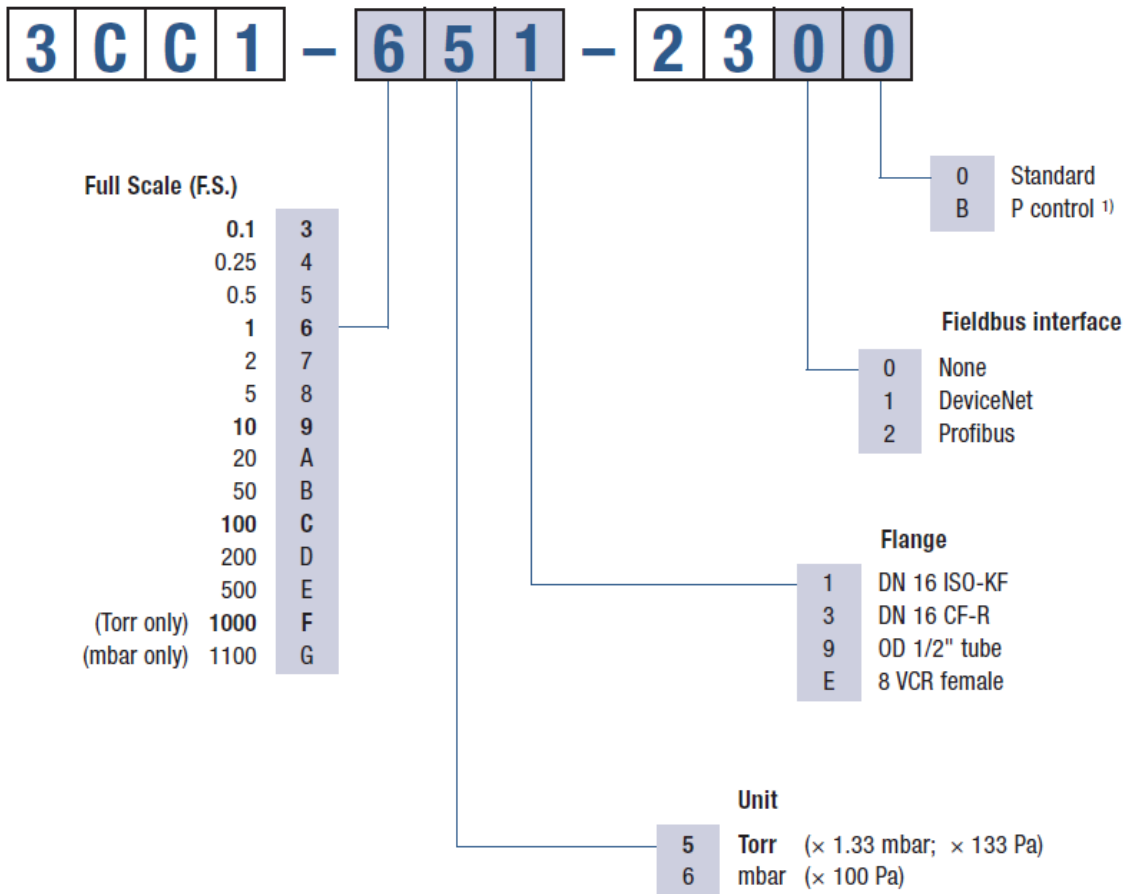
INFICON SKY CDG045D manometers are your best choice for high accurate total pressure measurement and control. CDG045D gauges are temperature controlled at 45 °C for superior signal stability and repeatability. They are available for full scale ranges from 100 mTorr to 1000 Torr, with all common flange types and fieldbus interfaces and provide a linear 0 to 10 V, gas type independent, pressure signal. INFICON capacitance manometers use an ultra pure alumina ceramic diaphragm which is corrosion proof. The advantages of the ceramic sensor are better signal stability, faster recovery from atmosphere, short warm up time and an extraordinary lifetime. INFICON CDG are high quality, cost effective pressure sensors for demanding vacuum applications.



BENEFITS

- Lower CoO (cost of ownership), 50% faster warm up, energy efficient low power consumption
- Easy integration, wide variety of full scales, flanges and interfaces, standard with two set points
- Easy one push button or remote signal zero command, zero offset adjustable
- Diagnostic port for quick service and maintenance
- Two year warranty, longer life time with advanced heating concept and gauge protection
- No long term recalibration due to excellent signal stability and repeatability, even in harsh plasma applications
- Compliance & standards: CE, EN, UL, SEMI, RoHS

ORDERING INFORMATION



¹⁾ Optimised signal filter setting for pressure control.

bold = standard products

Other flange types and full scale ranges (F.S.) on request.

SPECIFICATIONS

Type		10 Torr	100 Torr	500 Torr	200 Torr	50 Torr	20 Torr
F.S. (Full Scale)	Torr	10	100	500	200	50	20
F.S. (Full Scale)	Pa	1,333	13,332	66,661	26,664	6,666.1	2,666
F.S. (Full Scale)	mbar	13.3	133	666.61	267	66.67	26.7
Diagnostic port							
Protocol		RS232-C	RS232-C	RS232-C	RS232-C	RS232-C	RS232-C
Read		pressure, status, ID	pressure, status, ID	pressure, status, ID	pressure, status, ID	pressure, status, ID	pressure, status, ID
Set		set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset
Internal volume							
I. volume 1/2" tube	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
I. volume DN 16 ISO KF	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
I. volume DN 16 CF-R	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
I. volume 8 VCR®	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
Power consumption							
During Heat up	W	≤12	≤15	≤12	≤12	≤12	≤12
At operating temperature	W	≤10	≤8	≤8	≤8	≤8	≤8
Setpoint (SP1,SP2)							
Relay contact	V (dc)	≤30	≤30	≤30	≤30	≤30	≤30
Setpoint (SP1,SP2)							
Relay contact	A (dc)	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Temperature							
Operation (ambient)	°C	+10 ... +40	+10 ... +50	+10 ... +40	+10 ... +40	+10 ... +40	+10 ... +40
Bakeout at flange	°C	≤110	≤110	≤110	≤110	≤110	≤110
Storage	°C	-40 ... +65	-40 ... +65	-40 ... +65	-40 ... +65	-40 ... +65	-40 ... +65
Temperature effect							
on zero	percent FS/°C	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Weight							
Weight 1/2" tube	g	837	837	897	897	897	897
Weight DN 16 ISO KF	g	852	852	875	875	875	875
Weight DN 16 CF-R	g	875	875	852	852	852	852

SPECIFICATIONS

Type		5 Torr	2 Torr	0.5 Torr	0.25 Torr
F.S. (Full Scale)	Torr	5	2	0.5	0.25
F.S. (Full Scale)	Pa	666.61	266.66	66.66	33.3
F.S. (Full Scale)	mbar	6.6661	2.67	0.67	0.33
Diagnostic port					
Protocol		RS232-C	RS232-C	RS232-C	RS232-C
Read		pressure, status, ID	pressure, status, ID	pressure, status, ID	pressure, status, ID
Set		set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset
Internal volume					
I. volume 1/2" tube	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
I. volume DN 16 ISO KF	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
I. volume DN 16 CF-R	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
I. volume 8 VCR®	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
Power consumption					
During Heat up	W	≤12	≤12	≤12	≤12
At operating temperature	W	≤8	≤8	≤8	≤8
Setpoint (SP1,SP2)					
Relay contact	V (dc)	≤30	≤30	≤30	≤30
Setpoint (SP1,SP2)					
Relay contact	A (dc)	≤0.5	≤0.5	≤0.5	≤0.5
Temperature					
Operation (ambient)	°C	+10 ... +40	+10 ... +40	+10 ... +40	+10 ... +40
Bakeout at flange	°C	≤110	≤110	≤110	≤110
Storage	°C	-40 ... +65	-40 ... +65	-40 ... +65	-40 ... +65
Temperature effect					
on zero	percent FS/°C	0.0025	0.0025	0.005	0.005
Weight					
Weight 1/2" tube	g	897	897	897	897
Weight DN 16 ISO KF	g	875	875	875	875
Weight DN 16 CF-R	g	852	852	852	852

SPECIFICATIONS

Type		10 Torr	100 Torr	500 Torr	200 Torr	50 Torr	20 Torr
Weight 8 VCR®	g	897	897	837	837	837	837
Setpoint (SP1,SP2)							
Hysteresis	percent FS	1	1	1	1	1	1
Temperature effect							
on span	% of reading / °C	0.02	0.01	0.01	0.01	0.01	0.01
Accuracy (1)	% of reading	0.2	0.15	0.15	0.15	0.15	0.15
Pressure, max.	kPa (absolute)	260	260	400	260	260	260
Resolution	percent FS	0.003	0.003	0.003	0.003	0.003	0.003
Lowest reading	percent FS	0.01	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	0.05
Lowest suggested control pressure	percent FS	0.5	0.5	0.5	0.5	0.5	0.5
Supply voltage		+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)
Output signal (analog)	V (dc)	0 ... +10	0 ... +10	0 ... +10	0 ... +10	0 ... +10	0 ... +10
Response time (2)	ms	30	30	30	30	30	30
Degree of protection		IP 40	IP 40	IP 40	IP 40	IP 40	IP 40
Standards		EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2
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	D-sub, 15 pole, male

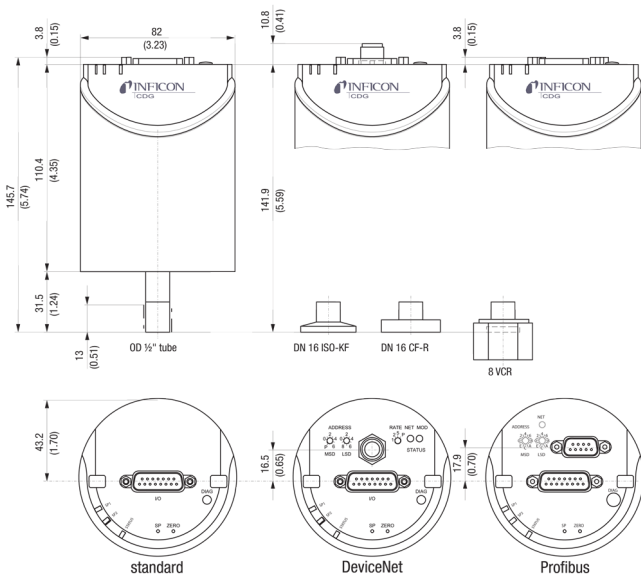
SPECIFICATIONS

Type		5 Torr	2 Torr	0.5 Torr	0.25 Torr
Weight 8 VCR®	g	837	837	837	837
Setpoint (SP1,SP2)					
Hysteresis	percent FS	1	1	1	1
Temperature effect					
on span	% of reading / °C	0.01	0.01	0.01	0.01
Accuracy (1)	% of reading	0.15	0.15	0.15	0.15
Pressure, max.	kPa (absolute)	260	260	130	130
Resolution	percent FS	0.003	0.003	0.003	0.003
Lowest reading	percent FS	0.01	0.01	0.01	0.01
Lowest suggested reading	percent FS	0.05	0.05	0.05	0.05
Lowest suggested control pressure	percent FS	0.5	0.5	0.5	0.5
Supply voltage		+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)
Output signal (analog)	V (dc)	0 ... +10	0 ... +10	0 ... +10	0 ... +10
Response time (2)	ms	30	30	30	130
Degree of protection		IP 40	IP 40	IP 40	IP 40
Standards		EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2	EN 61000-6-2/-6-3, EN 61010, UL 61010-1, CSA 22.2 No.61010-1, SEMI S-2
Electrical connection		D-sub, 15 pole, male	D-sub, 15 pole, male	D-sub, 15 pole, male	D-sub, 15 pole, male

SPECIFICATIONS

Type	10 Torr	100 Torr	500 Torr	200 Torr	50 Torr	20 Torr
Materials exposed to vacuum	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)

DIMENSIONS



SPECIFICATIONS

Type	5 Torr	2 Torr	0.5 Torr	0.25 Torr
Materials exposed to vacuum	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)	Aluminum oxide ceramic (Al ₂ O ₃), stainless steel (AISI 316L ⁽⁴⁾)



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