



SKY® CDG045D 0.05 ...1000Torr / mbar

SKY® CDG045D - 45°C - Unprecedented Full Scale Stability

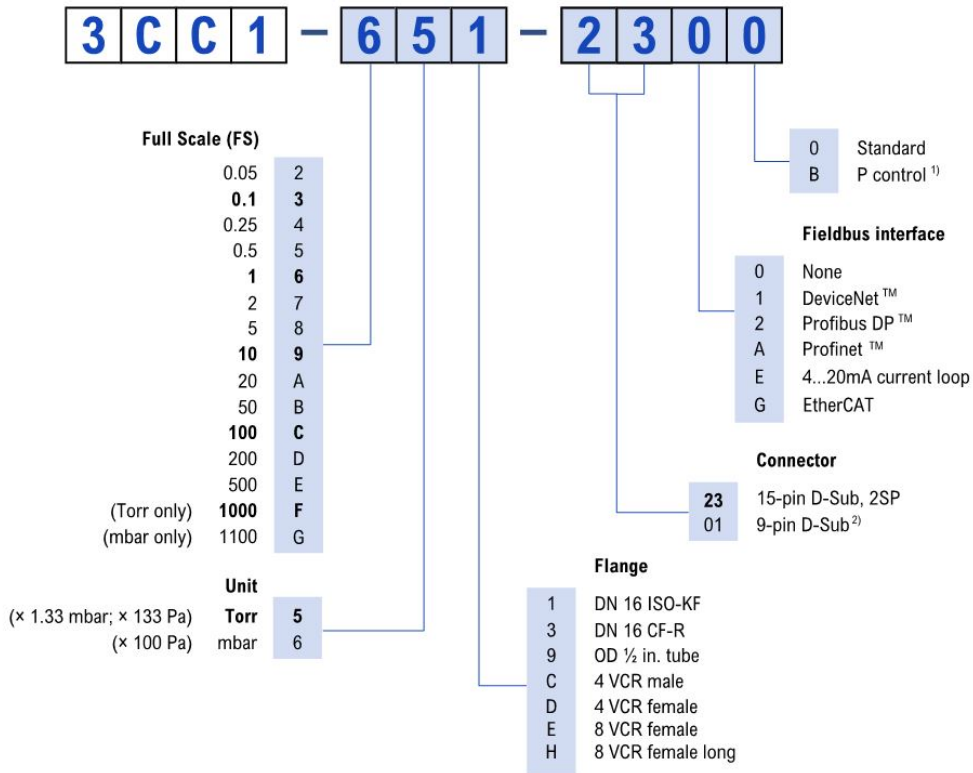
INFICON SKY CDG045D 压力计是实现高精度总压测量与控制的理想之选。CDG045D 真空计温度控制在 45 °C，具有卓越的信号稳定性和可重复性。在 50 mTorr 至 1000 Torr 满刻度范围内均可使用，带有所有常用类型的法兰和现场总线接口，能够提供 0 至 10 V、不受气体类型限制的线性压力信号。INFICON 电容式压力计采用超纯氧化铝陶瓷隔膜，具有防腐性。陶瓷传感器具有信号稳定性更佳、从大气恢复的速度更快、预热时间短和使用寿命长等诸多优势。INFICON CDG 压力传感器品质卓越，极具成本效益，适用于苛刻的真空应用。



好处

- 拥有成本更低，预热速度快 50%，节能，低功耗
- 易于集成，各种满刻度、法兰和接口，标配两个设定点
- 轻松一键归零或远程信号归零指令，可调零点偏移
- 诊断端口便于快速服务与维护
- 两年保修服务，先进的加热概念和真空计保护延长了使用寿命
- 卓越的信号稳定性和可重复性，即使是最严苛的等离子应用，都无需长期执行重新校准
- 合规性和标准：CE、EN、UL、SEMI、RoHS

ORDERING INFORMATION



1) Optimized signal filter setting for pressure control
 2) Not possible with fieldbus interfaces

bold = standard products

Other flange types on request.

规格

类型		1000 Torr, 1100 mbar	500 ... 1 Torr / mbar	0.5 ... 0.05Torr / mbar
精度 (1)	% of reading	0.15	0.15	0.15
温度效应				
零点	percent FS/°C	0.0025	0.0025	0.005
温度效应				
满量程	% of reading / °C	0.01	0.01	0.01
压力, 最大	kPa (absolute)	400	260	130
分辨率	percent FS	0.003	0.003	0.003
最低读数	percent FS	0.01	0.01	0.01
建议的最低读数	percent FS	0.05	0.05	0.05
建议的最低控制压力	percent FS	0.5	0.5	0.5
温度				
运行 (环境)	°C	+10 ... +40	+10 ... +40	+10 ... +40
在法兰处烘烤	°C	≤110	≤110	≤110
贮存	°C	-20 ... +65	-20 ... +65	-20 ... +65
电源电压		+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)	+14 ... +30 VDC or ±15 V (±5%)
功耗				
加热时	W	≤12	≤12	≤12
运行温度	W	≤8	≤8	≤8
输出信号 (模拟)	V (dc)	0 ... +10	0 ... +10	0 ... +10
反应时间 (2)	ms	30	30	130 / 30 ⁽³⁾
保护等级		IP 40	IP 40	IP 40
标准				
CE 合规		EN 61000-6-2/-6-3, EN 61010 & RoHS	EN 61000-6-2/-6-3, EN 61010 & RoHS	EN 61000-6-2/-6-3, EN 61010 & RoHS
ETL 认证		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
SEMI 合规		SEMI S2	SEMI S2	SEMI S2
电气连接		D-sub, 15 pole, male	D-sub, 15 pole, male	D-sub, 15 pole, male
设定点				
设定点数量		2 (SP1,SP2)	2 (SP1,SP2)	2 (SP1,SP2)
设定点				
继电器触点	V (dc)	≤30	≤30	≤30
设定点				
继电器触点	A (dc)	≤0.5	≤0.5	≤0.5

规格

类型		1000 Torr, 1100 mbar	500 ... 1 Torr / mbar	0.5 ... 0.05Torr / mbar
设定点				
滞后	percent FS	1	1	1
诊断端口				
协议		RS232-C	RS232-C	RS232-C
读数		pressure, status, ID	pressure, status, ID	pressure, status, ID
设置		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
暴露于真空的材料		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⁾)
内部容积				
内部容积 1/2" 管	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
内部容积 DN 16 ISO KF	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
内部容积 DN 16 CF-R	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
内部容积 8 VCR®	cm ³ (in. ³)	4.2 (0.26)	4.2 (0.26)	4.2 (0.26)
重量				
重量 1/2" 管	g	837	837	837
重量 DN 16 ISO KF	g	852	852	852
重量 DN 16 CF-R	g	875	875	875
Weight 4 VCR® female	g	877	877	877
Weight 4 VCR® male	g	861	861	861
重量 8 VCR®	g	897	897	897
Weight 8 VCR® female long	g	912	912	912
EtherCAT				
协议 EtherCAT		protocol specialized for EtherCAT	protocol specialized for EtherCAT	protocol specialized for EtherCAT
通讯标准		ETG.5003.1 S (R) V1.1.0 Common Device Profile ETG.5003.2080 S (R) V1.3.0 Specific Device Profile: Vacuum Gauge	ETG.5003.1 S (R) V1.1.0 Common Device Profile ETG.5003.2080 S (R) V1.3.0 Specific Device Profile: Vacuum Gauge	ETG.5003.1 S (R) V1.1.0 Common Device Profile ETG.5003.2080 S (R) V1.3.0 Specific Device Profile: Vacuum Gauge
节点地址		Explicit Device Identification	Explicit Device Identification	Explicit Device Identification

规格

类型	1000 Torr, 1100 mbar	500 ... 1 Torr / mbar	0.5 ... 0.05Torr / mbar
物理层	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)
数字功能读取	pressure, status, ID	pressure, status, ID	pressure, status, ID
数字功能设置	set points, filter, zero adjust, reset, DC offset	set points, filter, zero adjust, reset, DC offset	set points, filter, zero adjust, reset, DC offset
过程数据	Fixed PDO mapping and configurable PDO mapping	Fixed PDO mapping and configurable PDO mapping	Fixed PDO mapping and configurable PDO mapping
邮箱 (CoE)	SDO requests, responses and information	SDO requests, responses and information	SDO requests, responses and information
EtherCAT 连接器	2 x RJ45, 8-pin (socket), IN and OUT	2 x RJ45, 8-pin (socket), IN and OUT	2 x RJ45, 8-pin (socket), IN and OUT
电缆	shielded Ethernet CAT5e or higher	shielded Ethernet CAT5e or higher	shielded Ethernet CAT5e or higher
EtherCAT			
电缆长度	m (ft.)	≤100 (330)	≤100 (330)
Profinet			
Communication protocol	protocol specialized for Profinet	protocol specialized for Profinet	protocol specialized for Profinet
Data rate	100 Mbps	100 Mbps	100 Mbps
Physical layer	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)
Digital functions read	pressure, status, ID	pressure, status, ID	pressure, status, ID
Digital functions set	set points, filter, zero adjust, reset, DC offset	set points, filter, zero adjust, reset, DC offset	set points, filter, zero adjust, reset, DC offset
Profinet connector	2 x RJ45, 8-pin (socket), input & output	2 x RJ45, 8-pin (socket), input & output	2 x RJ45, 8-pin (socket), input & output
Profinet Cable	Special Ethernet Patch Cable or Crossover Cable, shielded (CAT5e quality or higher)	Special Ethernet Patch Cable or Crossover Cable, shielded (CAT5e quality or higher)	Special Ethernet Patch Cable or Crossover Cable, shielded (CAT5e quality or higher)
Cable length	≤100 m (330 ft)	≤100 m (330 ft)	≤100 m (330 ft)
DeviceNet™			
协议	DeviceNet™, group 2 slave only	DeviceNet™, group 2 slave only	DeviceNet™, group 2 slave only

规格

类型		1000 Torr, 1100 mbar	500 ... 1 Torr / mbar	0.5 ... 0.05Torr / mbar
MAC ID		address 00 - 63 by switch or network programmable	address 00 - 63 by switch or network programmable	address 00 - 63 by switch or network programmable
数字功能读取		pressure, status, ID	pressure, status, ID	pressure, status, ID
数字功能设置		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
技术规格		DeviceNet™ "Vacuum Gauge Device Profile" (ODVA)	DeviceNet™ "Vacuum Gauge Device Profile" (ODVA)	DeviceNet™ "Vacuum Gauge Device Profile" (ODVA)
设备类型		"VG" vacuum gauge	"VG" vacuum gauge	"VG" vacuum gauge
I / O 从属传讯		polling only	polling only	polling only
真空计 D 型连接器的电源电压		+14 ... +30 VDC or ±15 V / ≤12 W	+14 ... +30 VDC or ±15 V / ≤12 W	+14 ... +30 VDC or ±15 V / ≤12 W
为微型连接器上的 DeviceNet 收发器提供电压		24 V nom / <2 W (11 ... 25 V)	24 V nom / <2 W (11 ... 25 V)	24 V nom / <2 W (11 ... 25 V)
DeviceNet™ 连接器		microstyle, 5 pin, male	microstyle, 5 pin, male	microstyle, 5 pin, male
CDG (模拟输出、CDG 电源电压、设定点) 连接器		D-sub, 15 pin, male	D-sub, 15 pin, male	D-sub, 15 pin, male
DeviceNet™				
数据率	kBaud	125, 250, 500 by switch or network programmable	125, 250, 500 by switch or network programmable	125, 250, 500 by switch or network programmable
DeviceNet™				
电缆长度 125 kbps	m (ft.)	500 (1650)	500 (1650)	500 (1650)
电缆长度 250 kbps	m (ft.)	250 (825)	250 (825)	250 (825)
电缆长度 500 kbps	m (ft.)	100 (330)	100 (330)	100 (330)
Profibus DP				
波特率	kBaud	9.6 / 19.2 / 93.75 / 187.5 / 500	9.6 / 19.2 / 93.75 / 187.5 / 500	9.6 / 19.2 / 93.75 / 187.5 / 500
Profibus DP				
波特率	Mbaud	1.5 / 12	1.5 / 12	1.5 / 12
Profibus DP				
地址		address 00 - 125 by switch or network programmable	address 00 - 125 by switch or network programmable	address 00 - 125 by switch or network programmable
数字功能读取		pressure, status, ID	pressure, status, ID	pressure, status, ID

规格

类型		1000 Torr, 1100 mbar	500 ... 1 Torr / mbar	0.5 ... 0.05Torr / mbar
数字功能设置		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
Profibus DP 连接器		D-sub, 9 pin, female	D-sub, 9 pin, female	D-sub, 9 pin, female
CDG (模拟输出、电源电压、设定点) 连接器		D-sub, 15 pin, male	D-sub, 15 pin, male	D-sub, 15 pin, male
4-20mA current loop (analog)				
Signal range	mA	3.8 ... 20.2	3.8 ... 20.2	3.8 ... 20.2
Measuring range (zero ...FS)	mA	4.0 ... 20.0	4.0 ... 20.0	4.0 ... 20.0
4-20mA current loop (analog)				
Loaded impedance RL	Ω	typical 500 Ω \pm 1% 24 \pm 3 V (dc) (5)	typical 500 Ω \pm 1% 24 \pm 3 V (dc) (5)	typical 500 Ω \pm 1% 24 \pm 3 V (dc) (5)
Loaded impedance absolute	Ω	309 ... 657 Ω at 24 V (dc) (5)	309 ... 657 Ω at 24 V (dc) (5)	309 ... 657 Ω at 24 V (dc) (5)

(1) 非线性，迟滞，在 25 °C 环境工作温度中的可重复性，2 小时工作后无温度影响。

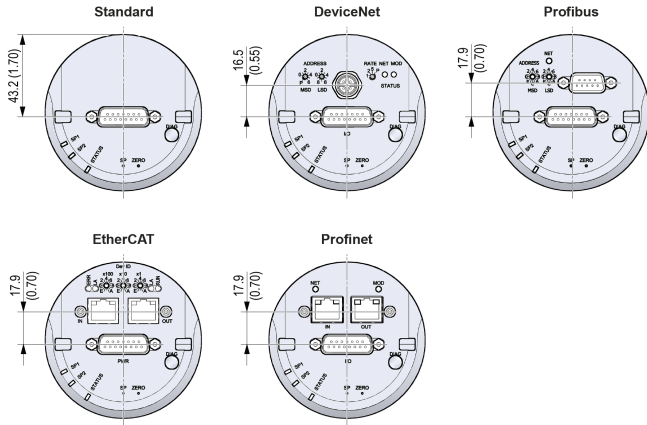
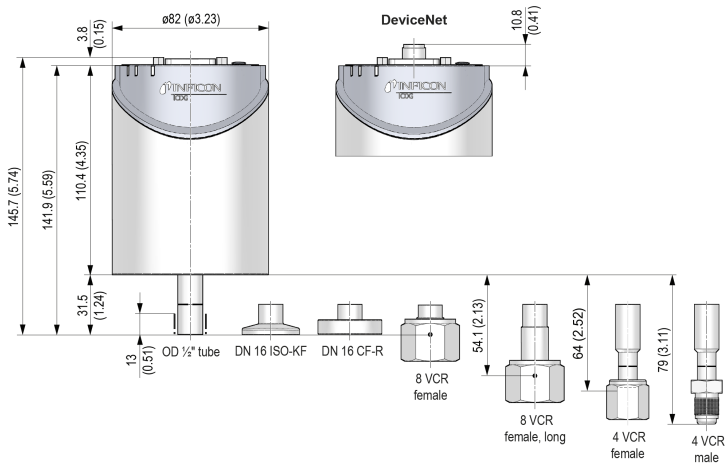
(2) 提高 10 ... 90 % FS

(3) 仅适用于压力控制型

(4) 18% Cr、10% Ni、3% Mo、69% Fe

尺寸

mm (inch)



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