



PCG55x 大气压至中真空真空计

INFICON 皮拉尼电容式膜片真空计 (PCG55x) 集 INFICON 皮拉尼技术和陶瓷电容式膜片传感器的优势于一体。

在 10 毫巴和大气压力之间的测量范围内，电容式膜片技术不受气体类型限制，能够提供高精度的压力测量值。PCG55x型皮拉尼电容式膜片真空计功能丰富，提供多种配置，可满足您的特定应用要求。



益处

- 在 10 毫巴以上压力下不受气体类型限制 – 能够安全排放任何气体混合物
- 在大气压力下具有高度的准确性和再现性 – 能够进行可靠的大气压力检测
- 快速大气检测功能 – 能够消除等待时间并缩短过程周期
- 灵活的安装方向 – 提供自由的工具设计
- 可配备钨丝 (PCG550)、镍丝 (PCG552) 或全陶瓷涂层 (PCG554) 传感器装置用于高腐蚀性应用
- 易于更换的即插即用式传感器元件与板载校准数据 – 确保高度再现性和低拥有成本
- 便于集成的可选输出信号
- 可选大气开关、显示屏和数字接口

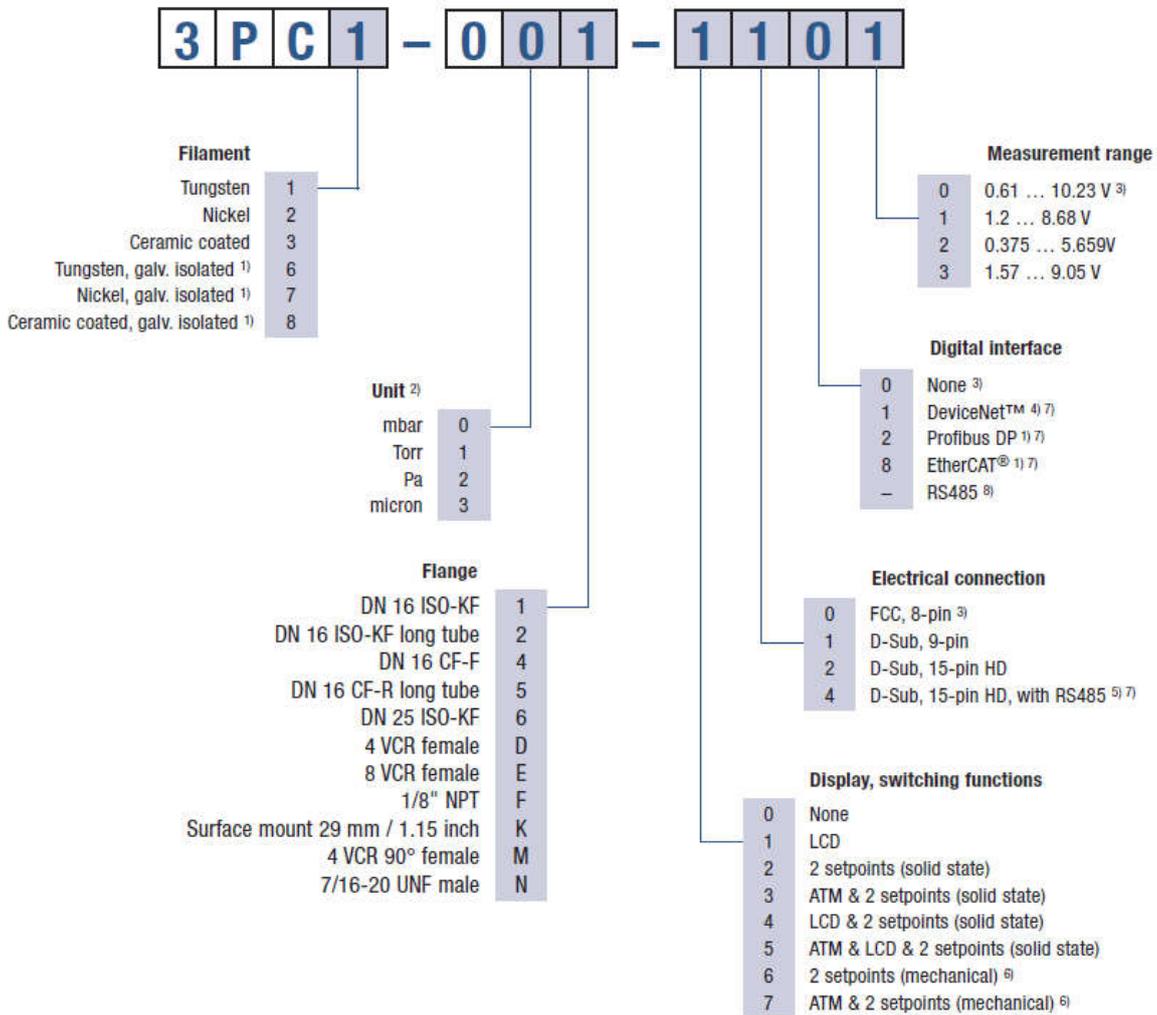


泰和光电有限公司
TAIHO OPTOELECTRONICS CO., LIMITED

泰和光电(香港)有限公司
电话: 00852-27935511
地址: 香港九龙旺角道 33 号凯途发展大厦 704 室

武汉泰和丰顺光电有限公司
电话: 027-87018827
地址: 武汉市东湖高新区光谷大道光谷总部国际 7 栋 206 室

广州泰浩科技有限公司
电话: 020-39901012
地址: 广州番禺区南国奥园小资天堂 2 座 2405 室



1) Only with D-Sub 9-pin connector available
 2) When selecting LCD (liquid crystal display) choose desired pressure unit
 3) Choose these settings when using an INFICON VGC40x or PGD400 controller or with number "4" from table "Electrical connection"
 4) Only with D-Sub 9-pin connector and galvanically isolated available
 5) Only without additional digital interface available
 6) Only with D-Sub 9-pin connector without LCD available
 7) Fieldbus options only available together with switching functions (select number "2", "3", "4" or "5" from table "Display, switching functions")
 8) Just selectable via number "4" from table "Electrical connection"

规格

类型		PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
测量范围	mbar	5×10^{-5} ... 1500	5×10^{-5} ... 1500	5×10^{-5} ... 1500
测量范围	Torr	3.8×10^{-5} ... 1125	3.8×10^{-5} ... 1125	3.8×10^{-5} ... 1125
精度				
5×10^{-4} ... 1×10^{-3} 毫巴 (N ₂)	% of reading	±50	±50	±50
1×10^{-3} ... 100 毫巴 (N ₂)	% of reading	±15	±15	±15
100 ... 950 毫巴	% of reading	±5	±5	±5
950 ... 1050 毫巴	% of reading	±2.5	±2.5	±2.5
可重复性				
1×10^{-3} ... 1100 毫巴 (N ₂)	% of reading	±2	±2	±2
容许压力	bar (absolute)	≤5	≤5	≤5
压力, 最大	bar (absolute)	≥10	≥10	≥10
容许温度				
运行 (环境)	°C	+10 ... +50	+10 ... +50	+10 ... +50
贮存	°C	-20 ... +65	-20 ... +65	-20 ... +65
在法兰处烘烤	°C	≤80	≤80	≤80
在长管法兰处烘烤	°C	≤250	≤250	≤250
电源电压	V (dc)	+15 ... +30	+15 ... +30	+15 ... +30
功耗				
无现场总线	W	≤2.5	≤2.5	≤2.5
DeviceNet™	W	≤3	≤3	≤3
Profibus	W	≤3	≤3	≤3
输出信号模拟 3PCx-0xx-xxx0	V	0 ... +10.23	0 ... +10.23	0 ... +10.23
输出信号模拟 3PCx-0xx-xxx1	V	0 ... +8.68	0 ... +8.68	0 ... +8.68
输出信号模拟 3PCx-0xx-xxx2	V	0 ... +5.659	0 ... +5.659	0 ... +5.659
输出信号模拟 3PCx-0xx-xxx3	V	0 ... +9.05	0 ... +9.05	0 ... +9.05
测量范围 3PCx-0xx-xxx0	V	+0.61 ... +10.23	+0.61 ... +10.23	+0.61 ... +10.23
测量范围 3PCx-0xx-xxx1	V	+1.2 ... +8.68	+1.2 ... +8.68	+1.2 ... +8.68
测量范围 3PCx-0xx-xxx2	V	+0.375 ... +5.659	+0.375 ... +5.659	+0.375 ... +5.659
测量范围 3PCx-0xx-xxx3	V	+1.57 ... +9.05	+1.57 ... +9.05	+1.57 ... +9.05
电压与压强				
3PCx-0xx-xxx0	volts per decade	1.286	1.286	1.286
3PCx-0xx-xxx1 / -xxx2 / -xxx3	volts per decade	1	1	1

规格

类型		PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
负载电阻	kΩ	>10	>10	>10
设定点继电器				
设定点数量		2	2	2
继电器触点		n.o., potential free	n.o., potential free	n.o., potential free
设定点继电器				
范围 (N ₂)	mbar	5×10 ⁻⁵ ... 1000	5×10 ⁻⁵ ... 1000	5×10 ⁻⁵ ... 1000
设定点继电器				
滞后	% of threshold	10	10	10
设定点继电器				
触点额定固态继电器	V (dc)	≤30	≤30	≤30
触点额定机械继电器	V (dc)	≤30	≤30	≤30
设定点继电器				
触点额定固态继电器	A (dc)	≤0.3	≤0.3	≤0.3
触点额定机械继电器	A (dc)	≤1	≤1	≤1
设定点继电器				
转换时间	ms	≤30	≤30	≤30
接口 (数字)		RS232C	RS232C	RS232C
电气连接				
3PCx-0xx-x0xx		FCC, 8-pin	FCC, 8-pin	FCC, 8-pin
3PCx-0xx-x1xx		D-Sub, 9-pin, male	D-Sub, 9-pin, male	D-Sub, 9-pin, male
3PCx-0xx-x2xx		D-Sub, 15-pin HD, male	D-Sub, 15-pin HD, male	D-Sub, 15-pin HD, male
3PCx-0xx-x4xx		D-Sub, 15-pin HD, with RS485, male	D-Sub, 15-pin HD, with RS485, male	D-Sub, 15-pin HD, with RS485, male
电缆长度	m (ft.)	≤100 (≤330)	≤100 (≤330)	≤100 (≤330)
RS232C 运行	m (ft.)	≤30 (≤100)	≤30 (≤100)	≤30 (≤100)
暴露于真空的材料		W, Ni, NiFe, Al ₂ O ₃ , SnAg, stainless steel, glass	Ni, NiFe, Al ₂ O ₃ , SnAg, stainless steel, glass	Al ₂ O ₃ , stainless steel
内部容积				
DN 16 ISO-KF	cm ³	4.7	4.7	4.7
DN 16 ISO-KF 长管	cm ³	14.5	14.5	14.5
DN 16 CF-F	cm ³	8	8	8
DN 16 CF-R 长管	cm ³	14	14	14

规格

类型		PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
DN 25 ISO-KF , 4 VCR	cm ³	5.5	5.5	5.5
8 VCR	cm ³	7	7	7
1/8" NPT , 7/16-20 UNF	cm ³	5.2	5.2	5.2
表面贴装 29 毫米/1.15 英寸	cm ³	4.9	4.9	4.9
4 VCR 90°	cm ³	7.9	7.9	7.9
重量				
无现场总线接口	g	115 ... 130	115 ... 130	115 ... 130
带现场总线接口	g	230 ... 250	230 ... 250	230 ... 250
保护等级		IP 40	IP 40	IP 40
标准				
CE 合规		EN 61000-6-2/-6-3, EN 61010	EN 61000-6-2/-6-3, EN 61010	EN 61000-6-2/-6-3, EN 61010
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
DeviceNet™				
协议		DeviceNet™, group 2 slave only	DeviceNet™, group 2 slave only	DeviceNet™, group 2 slave only
MAC ID		2 switches (address 00 - 63) or network programmable	2 switches (address 00 - 63) or network programmable	2 switches (address 00 - 63) or network programmable
数字功能		read pressure, select units: Torr, mbar, Pa, micron, counts; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error	read pressure, select units: Torr, mbar, Pa, micron, counts; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error	read pressure, select units: Torr, mbar, Pa, micron, counts; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error
技术规格		DeviceNet™ "Vacuum Gauge Device Profile"	DeviceNet™ "Vacuum Gauge Device Profile"	DeviceNet™ "Vacuum Gauge Device Profile"
设备类型		"CG" for combination gauge	"CG" for combination gauge	"CG" for combination gauge
I / O 从属传讯		polling only	polling only	polling only
DeviceNet 连接器		Micro-Style, 5-pin, male	Micro-Style, 5-pin, male	Micro-Style, 5-pin, male
DeviceNet™				
数据率开关	kBaud	125, 250, 500 or network programmable	125, 250, 500 or network programmable	125, 250, 500 or network programmable

规格

类型		PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
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)
DeviceNet™				
DeviceNet™ 的电源电压 3PI6- / 3PI7- / 3PI8-0xx- xxxx	V (dc)	+15 ... +30	+15 ... +30	+15 ... +30
DeviceNet™				
功耗 3PI6- / 3PI7- / 3PI8- 0xx-xxxx	W	≤3	≤3	≤3
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		2 switches (address 00 - 127) or network programmable	2 switches (address 00 - 127) or network programmable	2 switches (address 00 - 127) or network programmable
数字功能		read pressure, select units: Torr, mbar, Pa, micron, counts ; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error	read pressure, select units: Torr, mbar, Pa, micron, counts ; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error	read pressure, select units: Torr, mbar, Pa, micron, counts ; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error
Profibus DP 连接器		D-Sub, 9-pin, female	D-Sub, 9-pin, female	D-Sub, 9-pin, female
RS485C				
波特率	kBaud	9.6 / 19.2 / 38.4 /57.6	9.6 / 19.2 / 38.4 /57.6	9.6 / 19.2 / 38.4 /57.6
RS485C				
地址		2 switches (address 00 - 255)	2 switches (address 00 - 255)	2 switches (address 00 - 255)

规格

类型	PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
数字功能	read pressure, select units: Torr, mbar, Pa, micron, counts ; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error	read pressure, select units: Torr, mbar, Pa, micron, counts ; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error	read pressure, select units: Torr, mbar, Pa, micron, counts ; monitor gauge status, detailed alarm and warning information, safe state allows definition of behavior in case of error
RS485 连接器	D-Sub, 15-pin HD, male	D-Sub, 15-pin HD, male	D-Sub, 15-pin HD, male
EtherCAT			
协议 EtherCAT	protocol specialized for EtherCAT	protocol specialized for EtherCAT	protocol specialized for EtherCAT
通讯标准	ETG.5003 Part 1 "Semiconductor Device Profile" ETG.5003 Part 2080 "Specific Device Profile: Vacuum Pressure Gauge"	ETG.5003 Part 1 "Semiconductor Device Profile" ETG.5003 Part 2080 "Specific Device Profile: Vacuum Pressure Gauge"	ETG.5003 Part 1 "Semiconductor Device Profile" ETG.5003 Part 2080 "Specific Device Profile: Vacuum Pressure Gauge"
节点地址	Explicit Device Identification	Explicit Device Identification	Explicit Device Identification
物理层	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)
EtherCAT 连接器	RJ45, 8-pin (socket), IN and OUT	RJ45, 8-pin (socket), IN and OUT	RJ45, 8-pin (socket), IN and OUT
电缆	shielded Ethernet CAT5e or higher	shielded Ethernet CAT5e or higher	shielded Ethernet CAT5e or higher
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			
电缆长度	m (ft.)	≤100 (330)	≤100 (330)

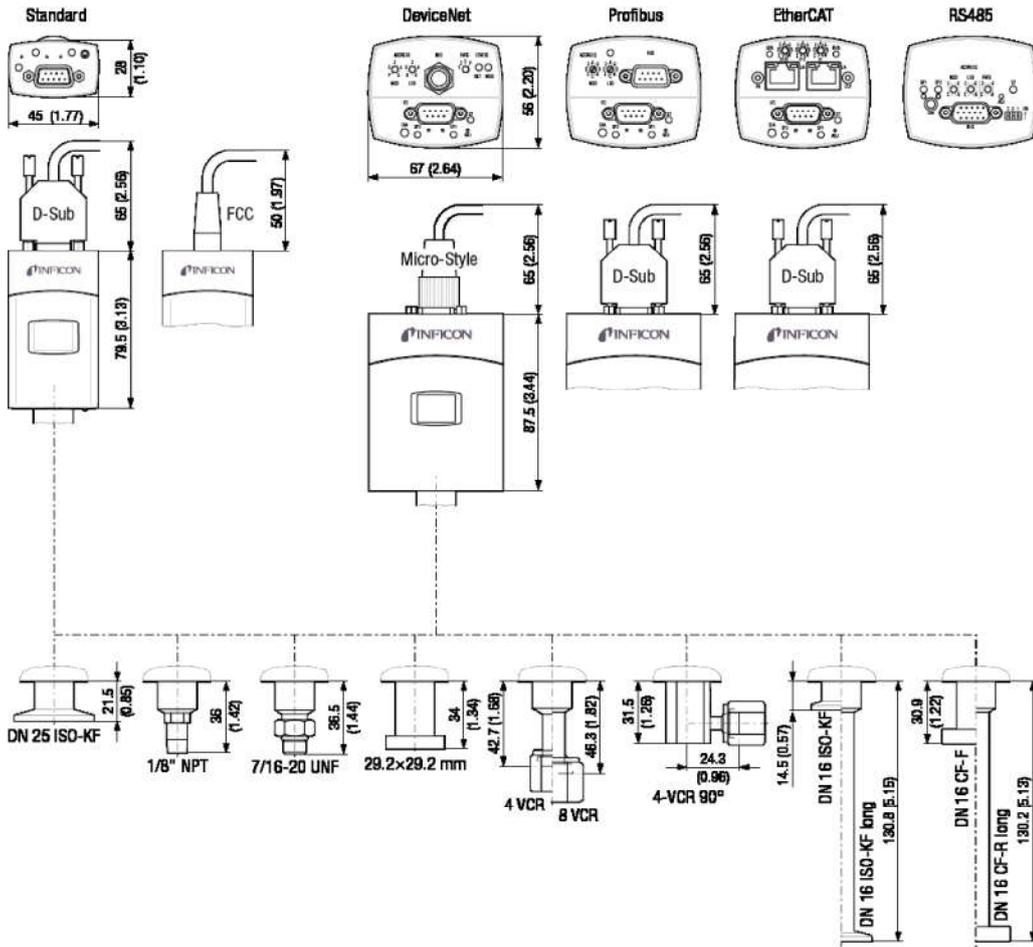
备件

	PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
PCG550备用传感器	357-925	-	-
PCG552备用传感器	-	357-936	-
PCG554备用传感器	-	-	357-947

附件

	PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
Diagnostic cable 1.9m (P3)	303-333	303-333	303-333
卡箍 DN 10-16 ISO-KF	211-001	211-001	211-001
细目过滤中心环组件DN 16 ISO-KF	211-097	211-097	211-097

尺寸



泰和光电有限公司

TAIHO OPTOELECTRONICS CO., LIMITED

泰和光电(香港)有限公司
 电话: 00852-27935511
 地址: 香港九龙旺角道 33 号凯途发展大厦 704 室

武汉泰和丰顺光电有限公司
 电话: 027-87018827
 地址: 武汉市东湖高新区光谷大道光谷总部国际 7 栋 206 室

广州泰浩科技有限公司
 电话: 020-39901012
 地址: 广州番禺区南国奥园小资天堂 2 座 2405 室