

PCG55x 大气压至中真空真空计

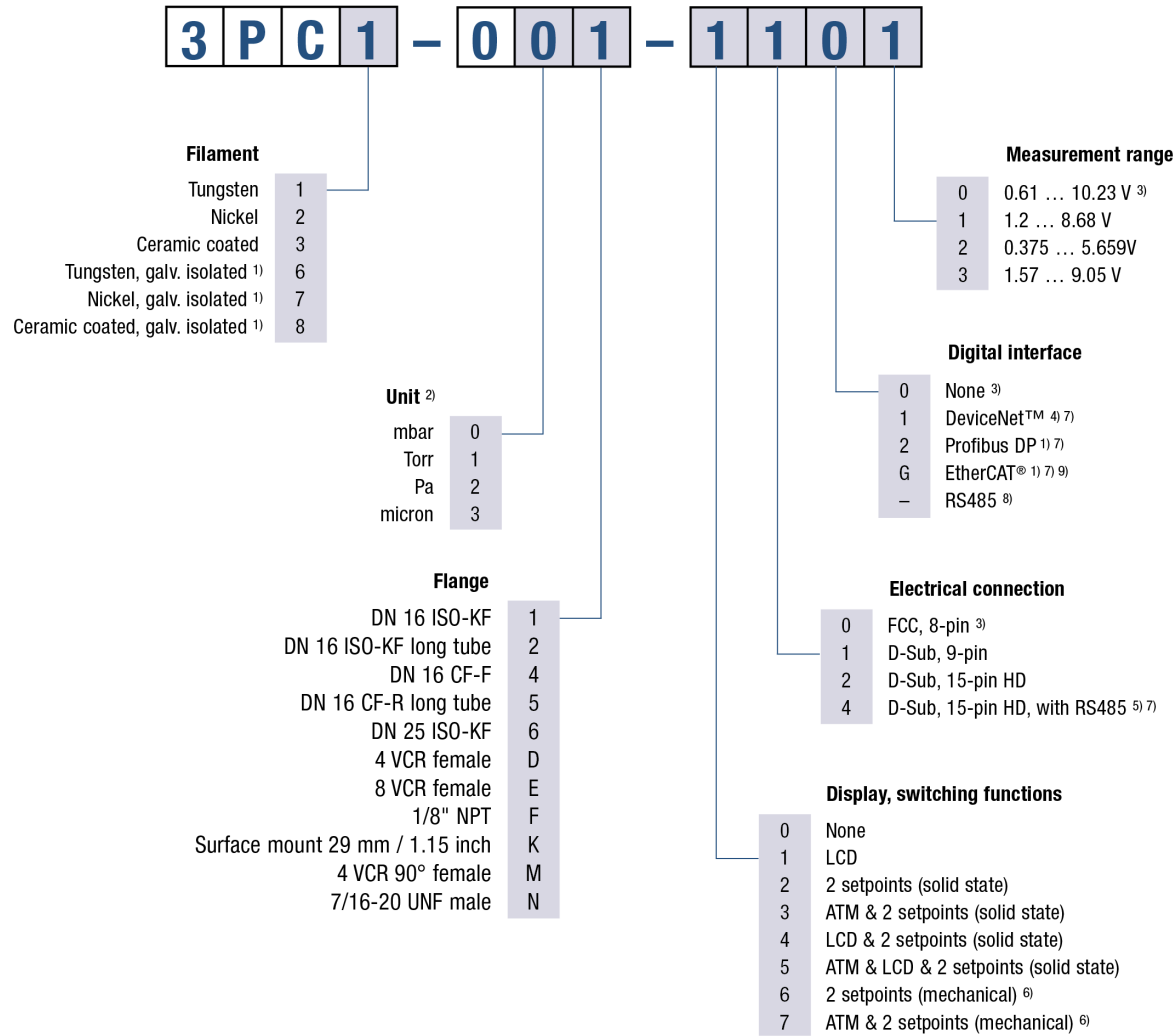
INFICON 皮拉尼电容膜片式测量仪 (PCG55x) 将 INFICON 皮拉尼技术与陶瓷电容膜片传感器的优点结合在单一产品中。

在 10 mbar 和大气压力之间的测量范围内，电容隔膜技术不受气体类型限制，能够提供高度精确的可靠压力测量值。PCG55x 还拥有各种功能，可针对条件苛刻的应用进行正确的产品配置。



好处

- 在 10 mbar 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、快速的大气压力检测
- 灵活的安装方向提供自由的加工设计
- 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
- Latest EtherCAT protocol Standard ETG.5003.2080 S (R) V1.3.0
- 易于更换的即插即用式传感元件与板载校准数据 - 保证了高度再现性和低拥有成本
- 可选的输出信号，易于集成
- 可选大气开关、显示屏和数字接口
- 合规和标准：CE、EN、UL、CSA、RoHS



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 VGC50x or PGD400 / PGD500 controller or when choosing "4" under "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"
 9) Communication standard ETG.5003.2080 S (R) V1.3.0; old version V1.0.0 still available on request

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
EtherCAT	W	≤4.5	≤4.5	≤4.5
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

规格

类型		PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
3PCx-0xx-xxx1 / -xxx2 / -xxx3	volts per decade	1	1	1
负载电阻	kΩ	>10	>10	>10
设定继电器				
设定数量		2	2	2
继电器触点		n.o., potential free	n.o., potential free	n.o., potential free
设定继电器				
范围 (N ₂)	mbar	5×10 ⁻⁵ ... 1000	5×10 ⁻⁵ ... 1000	5×10 ⁻⁵ ... 1000
设定继电器				
滞后	% of threshold	10	10	10
设定继电器				
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

规格

类型		PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
DN 16 CF-R 长管	cm ³	14	14	14
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™				

规格

类型		PCG550 Tungsten	PCG552 Nickel	PCG554 ceramic coated
数据率开关	kBaud	125, 250, 500 or network programmable	125, 250, 500 or network programmable	125, 250, 500 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)
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.5003.1 S (R) V1.1.0 Common Device ProfileETG.5003.2080 S (R) V1.3.0 Specific Device Profile: Vacuum Gauge	ETG.5003.1 S (R) V1.1.0 Common Device ProfileETG.5003.2080 S (R) V1.3.0 Specific Device Profile: Vacuum Gauge	ETG.5003.1 S (R) V1.1.0 Common Device ProfileETG.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
物理层	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)
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
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)

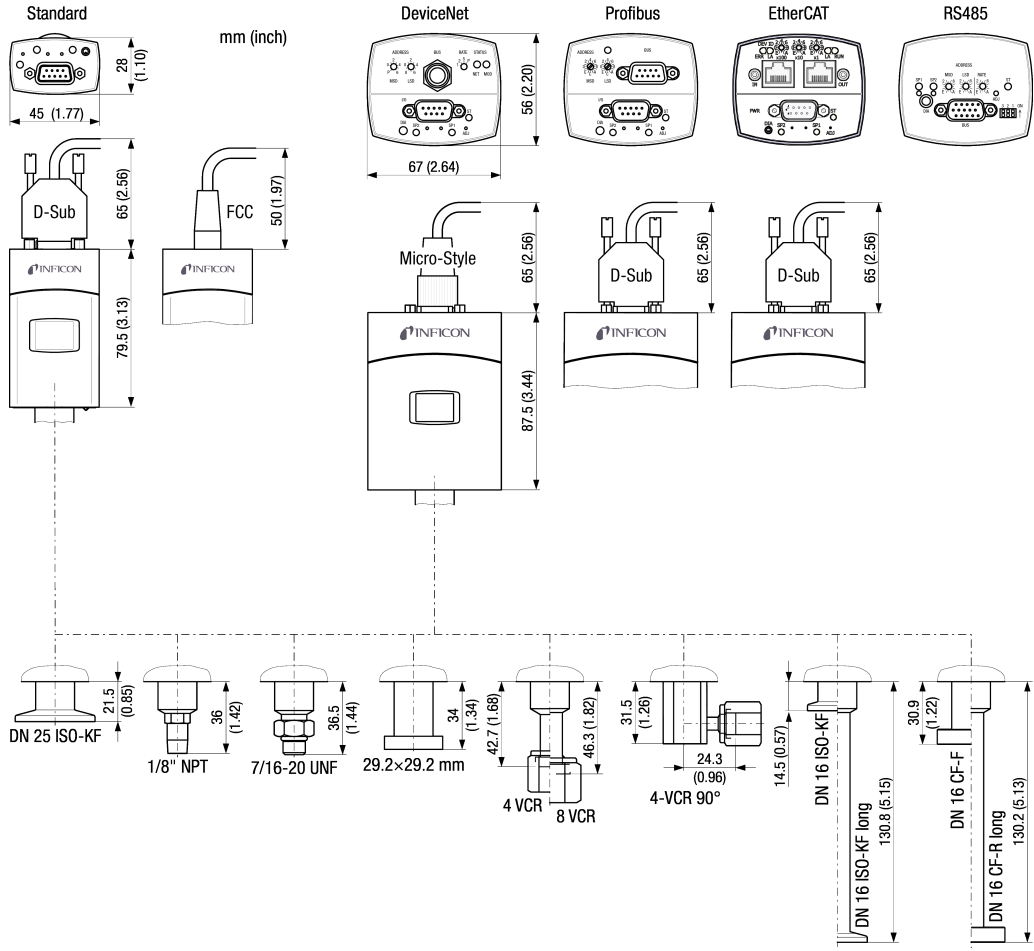
备件

	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



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==> Addition
 (other format)
 of "Power
 consumption
 for EtherCAT"