

VGC401, VGC402, VGC403

Vacuum Gauge Controllers

Your complete solution for process measurement and control.

Compatible with four measurement principles – hot cathode, cold cathode, Pirani, capacitance diaphragm gauges, the VGC400 series of controllers can monitor the entire pressure range from 10^{-10} to 1500 mbar (10^{-10} to 1125 Torr).

ADVANTAGES

- Firmware upgrades available on-line are easily downloaded via the RS232 interface
- Programmable 0 to 10 V chart recorder output with logarithmic / linear characteristics for each gauge or gauge combination (VGC402/403 only)
- High resolution – 16 Bit A/D converter
- Automatic identification of the connected INFICON gauges
- User selectable measurement unit (mbar, Torr, Pascal, micron)
- Up to six adjustable setpoints with adjustable hysteresis may be assigned to any channel
- Versatile, compact bench-top model design can easily be mounted in a panel or 19" rack
- Widerange power supply 90 to 250V, 50 to 60Hz

VGC401



VGC402



VGC403



ORDERING INFORMATION

Type	VGC401	VGC402	VGC403
Vacuum Gauge Controller	398-010	398-020	398-021
Adapter for rackmount 2HE / 3HE	398-499	–	–

ACCESSORIES

Gauges	PCG400 PSG10X / PSG400 / PSG50X PEG100 / MPG40X	BCG450 / BPG40X HPG400 BAG10X	CDG025 CDG045 CDG100
Cable to VGC 401/402/403 in m (ft)			
3 (9.9)	398-500	398-520	398-540
5 (16.5)	398-501	398-521	398-541
10 (33.0)	398-502	398-522	398-542
15 (49.5)	398-503	398-523	398-543
20 (66.0)	398-504	398-524	398-544
30 (99.0)	398-505	398-525	398-545

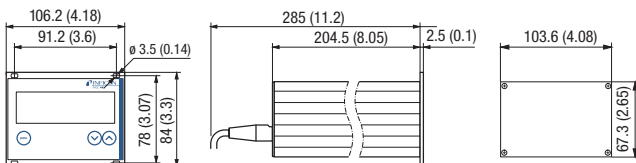
other lengths on request

SPECIFICATIONS

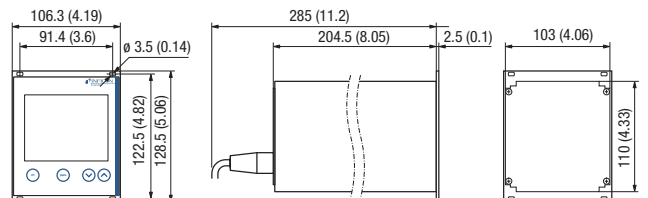
Type		VGC401	VGC402	VGC403
Measurement channels		1	2	3
Display		LED	LCD	LCD
Range	mbar (Torr)	2 x 10 ⁻¹⁰ ... 1500 (1.5 x 10 ⁻¹⁰ ... 1125)	5 x 10 ⁻¹⁰ ... 1500 (3.75 x 10 ⁻¹⁰ ... 1125)	5 x 10 ⁻¹⁰ ... 1500 (3.75 x 10 ⁻¹⁰ ... 1125)
Rate	1/s	10	10	10
A/D converter	bit	16	16	16
Connectable gauges with display range			1 x 10 ⁻³ x FS ... 1 x FS	
CDG025 / CDG045 / CDG100	Torr			
PCG400	mbar (Torr)		5 x 10 ⁻⁴ ... 1500 (3.75 x 10 ⁻⁴ ... 1125)	
PSG10X / PSG400 / PSG50X	mbar (Torr)		5 x 10 ⁻⁴ ... 1000 (3.75 x 10 ⁻⁴ ... 750)	
MPG40X	mbar (Torr)		5 x 10 ⁻⁹ ... 1000 (3.75 x 10 ⁻⁹ ... 750)	
PEG100	mbar (Torr)		1 x 10 ⁻⁹ ... 1 x 10 ⁻² (7.5 x 10 ⁻¹⁰ ... 7.5 x 10 ⁻³)	
BCG450	mbar (Torr)		5 x 10 ⁻¹⁰ ... 1500 (3.75 x 10 ⁻¹⁰ ... 1125)	
BPG40X	mbar (Torr)		5 x 10 ⁻¹⁰ ... 1000 (3.75 x 10 ⁻¹⁰ ... 750)	
HPG400	mbar (Torr)		2 x 10 ⁻⁶ ... 1000 (1.5 x 10 ⁻⁶ ... 750)	
BAG10X	mbar (Torr)	2 x 10 ⁻¹⁰ ... 1 x 10 ⁻¹ (1.5 x 10 ⁻¹⁰ ... 7.5 x 10 ⁻²)	–	–
Measurement unit (selectable)		mbar, Torr, Pascal, micron		
Setpoints				
Setpoint relays		1	4	6
Channel assignment		1	1 or 2	1/2 or 3
Adjustment range		Sensor dependent		
Hysteresis		adjustable		
Relay contact		potential free change over contact		
Contact rating	V AC / A V DC / A	30 / 1 60 / 0.5	30 / 1 60 / 0.5	30 / 1 60 / 0.5
Connector		D-sub, 9pin, male	D-sub, 25pin, female	D-sub, 25pin, female
Analog output		0 ... 10.3 Volt, sensor analog output signal		
Range				
Programmable analog output		–	1	1
Connector		D-sub, 9pin, male	D-sub, 9pin, male	D-sub, 9pin, male
Interface (digital)		RS 232 C	RS 232 C	RS 232 C
Connector		D-sub, 9pin, female	D-sub, 9pin, female	D-sub, 9pin, female
Power				
Supply	V	90 ... 250	90 ... 250	90 ... 250
Frequency	Hz	50 ... 60	50 ... 60	50 ... 60
Consumption	W	≤ 30	≤ 45	≤ 65
Temperature				
Operation (ambient)	°C	5 ... 50	5 ... 50	5 ... 50

DIMENSIONS

VGC401



VGC402 / VGC403



mm (inch)



GLOBAL HEADQUARTERS:

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UNITED STATES FRANCE GERMANY LIECHTENSTEIN SWITZERLAND UNITED KINGDOM CHINA JAPAN KOREA SINGAPORE TAIWAN

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