

VGC40x

Your complete solution for process measurement and control.

Compatible to all INFICON active gauges, the VGC400 series of controllers can monitor the entire pressure range from 10⁻¹⁰ to 1500 mbar (10⁻¹⁰ to 1125 Torr) and the set point status.



BENEFITS

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

ORDERING INFORMATION

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

ACCESSORIES

Gauges	PCG, PEG, PSG, MPG	BAG, BCG, BPG, HPG, CDG	CDG (unheated)
Signal read out / communication	analog	digital, analog possible	analog
Connector	FCC / FCC	D-Sub / D-Sub	FCC / D-Sub

Cable to VGC401 / VGC402 / VGC403 in m (ft)			
3 (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
Display Range	mbar	$2 \times 10^{-10} \dots 1500$	$5 \times 10^{-10} \dots 1500$	$5 \times 10^{-10} \dots 1500$
Display Range	Torr	$1.5 \times 10^{-10} \dots 1125$	$3.75 \times 10^{-10} \dots 1125$	$3.75 \times 10^{-10} \dots 1125$
Rate	1/s	10	10	10
A/D converter	bit	16	16	16
Connectable gauges with display range				
CDG (A/D)	mbar	$1 \times 10^{-3} \times \text{FS} \dots 1 \times \text{FS}$	$1 \times 10^{-3} \times \text{FS} \dots 1 \times \text{FS}$	$1 \times 10^{-3} \times \text{FS} \dots 1 \times \text{FS}$
PCG550 (1)	mbar	$5 \times 10^{-4} \dots 1500$	$5 \times 10^{-4} \dots 1500$	$5 \times 10^{-4} \dots 1500$
PSG	mbar	$5 \times 10^{-4} \dots 1000$	$5 \times 10^{-4} \dots 1000$	$5 \times 10^{-4} \dots 1000$
MPG	mbar	$5 \times 10^{-9} \dots 1000$	$5 \times 10^{-9} \dots 1000$	$5 \times 10^{-9} \dots 1000$
PEG	mbar	$1 \times 10^{-9} \dots 1 \times 10^{-2}$	$1 \times 10^{-9} \dots 1 \times 10^{-2}$	$1 \times 10^{-9} \dots 1 \times 10^{-2}$
BCG	mbar	$5 \times 10^{-10} \dots 1500$	$5 \times 10^{-10} \dots 1500$	$5 \times 10^{-10} \dots 1500$
BPG	mbar	$5 \times 10^{-10} \dots 1000$	$5 \times 10^{-10} \dots 1000$	$5 \times 10^{-10} \dots 1000$
HPG	mbar	$2 \times 10^{-6} \dots 1000$	$2 \times 10^{-6} \dots 1000$	$2 \times 10^{-6} \dots 1000$
BAG	mbar	$2 \times 10^{-10} \dots 1 \times 10^{-1}$	$2 \times 10^{-10} \dots 1 \times 10^{-1}$	$2 \times 10^{-10} \dots 1 \times 10^{-1}$
Connectable gauges with display range				
PCG550 (1)	Torr	$3.75 \times 10^{-4} \dots 1125$	$3.75 \times 10^{-4} \dots 1125$	$3.75 \times 10^{-4} \dots 1125$
PSG	Torr	$3.75 \times 10^{-4} \dots 750$	$3.75 \times 10^{-4} \dots 750$	$3.75 \times 10^{-4} \dots 750$
MPG	Torr	$3.75 \times 10^{-9} \dots 750$	$3.75 \times 10^{-9} \dots 750$	$3.75 \times 10^{-9} \dots 750$
PEG	Torr	$7.5 \times 10^{-10} \dots 7.5 \times 10^{-3}$	$7.5 \times 10^{-10} \dots 7.5 \times 10^{-3}$	$7.5 \times 10^{-10} \dots 7.5 \times 10^{-3}$
BCG	Torr	$3.75 \times 10^{-10} \dots 1125$	$3.75 \times 10^{-10} \dots 1125$	$3.75 \times 10^{-10} \dots 1125$
BPG	Torr	$3.75 \times 10^{-10} \dots 750$	$3.75 \times 10^{-10} \dots 750$	$3.75 \times 10^{-10} \dots 750$
HPG	Torr	$1.5 \times 10^{-6} \dots 750$	$1.5 \times 10^{-6} \dots 750$	$1.5 \times 10^{-6} \dots 750$
BAG	Torr	$1.5 \times 10^{-10} \dots 7.5 \times 10^{-2}$	$1.5 \times 10^{-10} \dots 7.5 \times 10^{-2}$	$1.5 \times 10^{-10} \dots 7.5 \times 10^{-2}$
Measurement unit (selectable)		mbar, Torr, Pascal, micron	mbar, Torr, Pascal, micron	mbar, Torr, Pascal, micron
Setpoints				
Setpoint relays		1	4	6
Channel assignment		1	1 or 2	1/2 or 3
Adjustment range		Sensor dependent	Sensor dependent	Sensor dependent
Hysteresis		adjustable	adjustable	adjustable

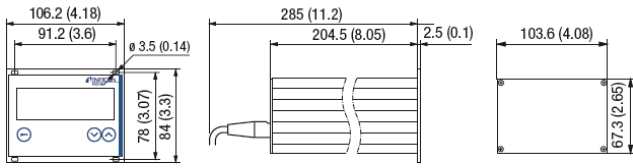
SPECIFICATIONS

Type		VGC401	VGC402	VGC403
Relay contact		potential free change over contact	potential free change over contact	potential free change over contact
Connector SP		D-Sub, 9 pin, male	D-Sub, 25 pin, female	D-Sub, 25 pin, female
Setpoints				
Contact rating	V (ac)	30	30	30
Setpoints				
Contact rating	A (ac)	2	1	1
Setpoints				
Contact rating	V (dc)	60	60	60
Setpoints				
Contact rating	A (dc)	1	0.5	0.5
Analog output				
Range		0 ... 10 Volt , sensor analog output signal	0 ... 10 Volt , sensor analog output signal	0 ... 10 Volt , sensor analog output signal
Programmable analog output			1	1
Connector		D-Sub, 9 pin, male	D-Sub, 9 pin, male	D-Sub, 9 pin, male
Interface RS232C (digital)				
Connector Interface		D-Sub, 9 pin, female	D-Sub, 9 pin, female	D-Sub, 9 pin, female
Power				
Supply	V	90 ... 250	90 ... 250	90 ... 250
Power				
Frequency	Hz	50 ... 60	50 ... 60	50 ... 60
Power				
Consumption	W	≤30	≤45	≤65
Operation temperature (ambience)	°C	+5 ... +50	+5 ... +50	+5 ... +50

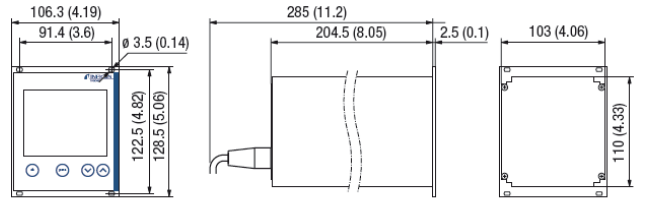
(1) down to 5×10^{-4} with parametermode "PRE" adjustable

DIMENSIONS

VGC401



VGC402 & VGC403



mm (inch)



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