

# PEG100

## Penning Gauge

The INFICON Penning Gauge PEG100 provides reliable high vacuum measurements. The rugged penning cold cathode sensor has no filament to burn out. Due to titanium cathode plates and the reduced high voltage after plasma ignition, the gauge can be operated also in sputtering applications. The fieldbus options, in addition to the logarithmic analog output signal, allow easy integration into vacuum systems using Profibus DP or DeviceNet protocols.

### ADVANTAGES

- Wide measurement range from  $5 \times 10^{-9}$  to  $1 \times 10^{-2}$  mbar ( $7.5 \times 10^{-10}$  to  $7.5 \times 10^{-10}$  Torr)
- All-metal cold cathode sensor (Penning) with ceramic feedthrough
- New electrode geometry provides excellent ignition properties
- Decreased high voltage after plasma ignition and titanium cathode plates reduce risk of contamination, even during sputtering operations with argon
- The anode ring and the titanium cathode can be cleaned or replaced easily
- Minimal magnetic field intensity adjacent to gauge
- LED indicator for power on and plasma ignited
- Logarithmic analog output signal
- Fieldbus interface (Profibus DB, DeviceNet) for easy integration into vacuum systems using network communications

### APPLICATIONS

- High vacuum pressure monitoring
- Evaporation and sputtering systems
- General vacuum measurement and control in the fine and high vacuum range



### ORDERING INFORMATION

Type	PEG100	PEG100-D with DeviceNet™	PEG100-P with Profibus DP™
DN 25 ISO-KF	351-000	351-003	351-005
DN 40 CF-R	351-002	351-004	—
Replacement cathode plates, titanium Set of 5 pieces	351-490	351-490	351-490

## SPECIFICATIONS

			PEG100
Measurement range	mbar		$1 \times 10^{-9}$ to $1 \times 10^{-2}$
	Torr		$7.5 \times 10^{-10}$ to $7.5 \times 10^{-3}$
Accuracy	$10^{-8}$ to $10^{-4}$ mbar	% of reading	±30
Pressure, max. absolute		bar	10
Temperature			
Operation (ambient)		°C	+10 to +50
Storage		°C	-20 to +75
Bakeout			
without electronics		°C	350
with electronics, at flange		°C	70
Supply			
Voltage		V DC	14.5 to 36
Consumption, max.		W	<2
Output signal analog		V	0 to 10.6
Measurement range		V	0.66 to 10
Relation voltage / pressure		V / Decade	1.333
Connector			FCC 68, female, 8 pin (shielded)
Cable length, max. (analog)		m (ft)	100 (330)
Materials exposed to vacuum			Stainless steel, CrNi, Al <sub>2</sub> O <sub>3</sub> , NiFe, Mo, Cu, Ni, Ti
Internal volume		cm <sup>3</sup> (inch) <sup>3</sup>	21 (1.28)
Weight, approx.		g	500
Protection type			IP40

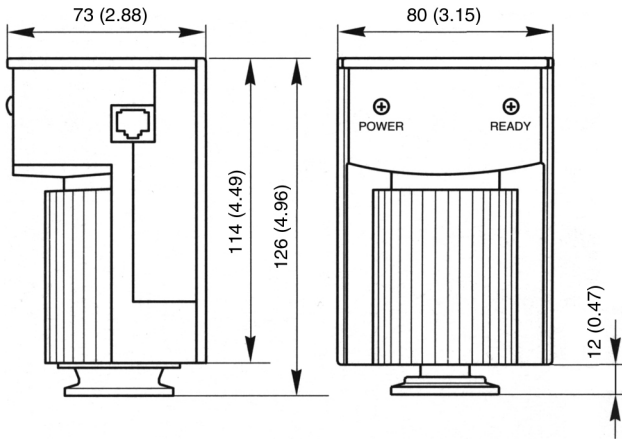
## SPECIFICATIONS

			PEG100-D DeviceNet™
Device type			generic
Explicit peer to peer messaging			no
I / O peer to peer messaging			no
Configuration consistency value			no
Faulted node recovery			no
Baud rates		kBaud	125 / 250 / 500
Master / Scanner			no
I / O slave messaging			
Bit Strobe			yes
Polling			yes
Cyclic			yes
Change of State (COS)			yes
Supply for DeviceNet™		V DC	11 to 25
Connector for DeviceNet™			Phoenix Combicon, 5 pin

## SPECIFICATIONS

			PEG100-P Profibus DP
Supported baud rates (auto detection)		kBaud	9.6 / 19.2 / 93.75 / 187.5 / 500 / 1500
Expanded user parameter data		Bytes	5
Configuring			
Number of input and output data			2
Sync-Mode and Freeze-Mode			Yes
Connector			D-sub, 9 pin

## DIMENSIONS



mm (inches)



### GLOBAL HEADQUARTERS:

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Due to our continuing program of product improvements, specifications are subject to change without notice.  
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