PEG100 Medium to Ultra-High Vacuum 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.

BENEFITS

- Wide measurement range from 1 x 10-9 to 1 x 10-2 mbar (7.5 x 10-10 to 7.5 x 10-3 Torr)
- All-metal cold cathode sensor (Penning) with ceramic feedthrough
- Innovative 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

ORDERING INFORMATION

Type		PEG100
PEG100 DN 25 ISO-KF		351-000
PEG100 DN 40 CF-F		351-002
PEG100-D DNet, DN 25 ISO-KF		351-003
PEG100-D DNet, DN 40 CF-F		351-004
PEG100-P PBus, DN 25 ISO-KF		351-005

SPECIFICATIONS

Type		PEG100
Measurement range	mbar	1×10^{-9} to 1×10^{-2}
Measurement range	Torr	7.5×10^{-10} to 7.5×10^{-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
Bakeout with electronics, at flange	°C	70
Supply		
Voltage	V (dc)	14.5 to 36
Supply		
Consumption, max.	W	<2
Output signal analog		
Output signal	V	0 to 10.6
Measurement range	V	0.66 to 10
Output signal analog		
Relation voltage / pressure	volts per 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_2O_3, NiFe, Mo, Cu, Ni, Ti
Internal volume	cm³ (in.³)	21 (1.28)
Weight, approx.	g	500
Protection type		IP40

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SPECIFICATIONS

Type		PEG100
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
Master / Scanner		no
I / 0 slave messaging: Bit Strobe		yes
I / 0 slave messaging: Polling		yes
I / 0 slave messaging: Cyclic		yes
I / 0 slave messaging: Change of State (COS)		yes
Connector for DeviceNet™		Phoenix Combicon, 5 pin
DeviceNet™		
Baud rates	kBaud	125 / 250 / 500
DeviceNet™		
Supply for DeviceNet™	V (dc)	11 to 25
Profibus DP		
Supported baud rates (auto detection)	kBaud	9.6 / 19.2 / 93.75 / 187.5 / 500 / 1500
Profibus DP		
Expanded user parameter data	byte	5
Profibus DP		
Configuring: Number of input and output data		2
Sync-Mode and Freeze-Mode		Yes
Connector for Profibus		D-sub, 9 pin

SPAREPARTS

	PEG100
Spare Cathode Plate, set of 5 pcs	351-490

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DIMENSIONS

73 (2.88)

80 (3.15)

114 (4.49)

126 (4.96)

POWER

READY

12 (0.47)