

# PSG100-S, PSG101-S

## Pirani Standard Gauge

The INFICON Pirani Standard Gauges PSG100-S and PSG101-S are especially designed for easy integration into vacuum systems using Profibus DP or DeviceNet™ fieldbus protocols. The gauges are equipped with a set point and for corrosive applications, a platinum filament version is available.



### ADVANTAGES

- Fieldbus interface (Profibus DP, DeviceNet™) for easy integration into vacuum systems using network communications
- For corrosive applications or high levels of water vapors the PSG101-S uses a platinum filament and a Al<sub>2</sub>O<sub>3</sub> ceramic feedthrough
- Setpoint with adjustable threshold over a wide range
- Mount in any orientation
- Logarithmic analog output signal
- Sensor cell is easily replaced

### APPLICATIONS

- Processes with corrosive gases (PSG101-S)
- Fore vacuum pressure monitoring
- Controlling of high vacuum ionization gauges
- Safety circuits in vacuum systems
- General vacuum measurement and control in the fine and rough vacuum range

### ORDERING INFORMATION

Type	PSG100-S DN 16 ISO-KF, Tungsten	PSG101-S DN 16 ISO-KF, Platinum
With setpoint	n/a	350-030
With DeviceNet™ (PSG100-SD, PSG101-SD)	350-021	350-031
With Profibus DP (PSG100-SP, PSG101-SP)	350-980	350-98
Replacement sensor (DN16 ISO KF)	350-980	350-981

## SPECIFICATIONS

			PSG100-S Tungsten	PSG101-S Platinum
Measurement range (air, O <sub>2</sub> , CO, N <sub>2</sub> )	mbar Torr		5 x 10 <sup>-4</sup> to 1000 3.8 x 10 <sup>-4</sup> to 750	
Filament material			tungsten	platinum
Mounting orientation			any	
Feldbus protocol			DeviceNet™ or Profibus DP	
Setpoint			1	
Range	mbar		1 x 10 <sup>-3</sup> to 500	
Relay contact			n.o. / potential free	
Hysteresis			≈30% of adjusted pressure	
Contact rating	VDC / A		60 / 0.5	
Relay status			LED, green	
Pressure, max. absolute	bar		3	10 <sup>1)</sup>
Temperature				
Operation (ambient)	°C		+10 to +50	
Storage	°C		-20 to +70	
Bakeout at flange	°C		80	
Power 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			tungsten, Al, nickel-plated steel, stainless steel, NiFe, glass, CrNi8020, epoxy cement	platinum, stainless steel, CrNi, Al <sub>2</sub> O <sub>3</sub> ceramics, NiFe, Mo, Ni
Flange			DN 16 ISO-KF	
Internal volume	DN 16 ISO-KF	cm <sup>3</sup> (inch) <sup>3</sup>	11 (0.67)	
Weight, approx.	DN 16 ISO-KF	g	290	
Protection type			IP40	

<sup>1)</sup> Threaded connections only

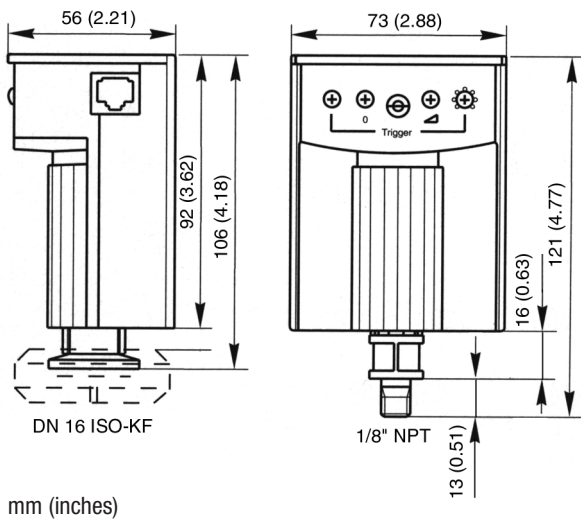
## SPECIFICATIONS

			PSG100-SP Profibus DP, PSG101-SP Profibus DP	
Supported baud rates (for 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	

## SPECIFICATIONS

		PSG100-SD DeviceNet™, PSG101-SD 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

## DIMENSIONS



### GLOBAL HEADQUARTERS:

Two Technology Place, East Syracuse, NY 13057 USA  
 Tel: +1.315.434.1100 Fax: +1.315.437.3803 E-mail: reachus@inficon.com

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

Visit our website for contact information and other sales offices worldwide. [www.inficon.com](http://www.inficon.com)  
 Due to our continuing program of product improvements, specifications are subject to change without notice.  
 tiba21e1 (2004-06) ©2003 INFICON