

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. For corrosive applications, a platinum filament version is available.



ADVANTAGES

- Fieldbus interface (Profibus DB, DeviceNet™) for easy integration into vacuum systems using network communications
- For corrosive applications or high levels of water vapors the PSG101-S, using a platinum filament and a Al₂O₃ ceramic feedthrough
- Setpoint with adjustable threshold over a wide range
- Mounting 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)	350-022	350-032
Replacement sensor (DN16 ISO KF)	350-980	350-981

SPECIFICATIONS

			PSG100-S Tungsten	PSG101-S Platinum
Measurement range (air, O ₂ , CO, N ₂)	mbar Torr		5 x 10 ⁻⁴ ... 1000 3.8 x 10 ⁻⁴ ... 750	
Filament material			tungsten	platinum
Mounting orientation			any	
Feldbus protocol			DeviceNet™ or Profibus DP	
Setpoint			1	
Range	mbar		1 x 10 ⁻³ ... 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 ¹⁾
Temperature				
Operation (ambient)	°C		+10 ... +50	
Storage	°C		-20 ... +70	
Bakeout at flange	°C		80	
Power supply				
Voltage	V DC		14.5 ... 36	
Consumption, max.	W		<2	
Output signal analog	V		0 ... 10.6	
Measurement range	V		0.66 ... 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 ₂ O ₃ ceramics, NiFe, Mo, Ni
Flange			DN 16 ISO-KF	
Internal volume	DN 16 ISO-KF	cm ³ (inch) ³	11 (0.67)	
Weight, approx.	DN 16 ISO-KF	g	290	
Protection type			IP40	

¹⁾ Threaded connections only

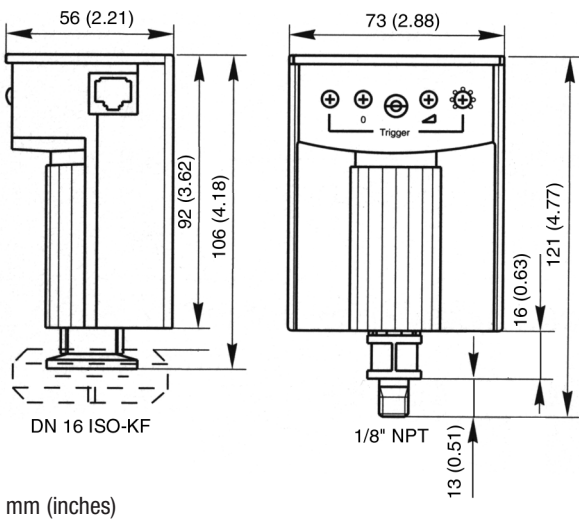
SPECIFICATIONS

			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 ... 25
Connector for DeviceNet™		Phoenix Combicon, 5 pin

DIMENSIONS



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