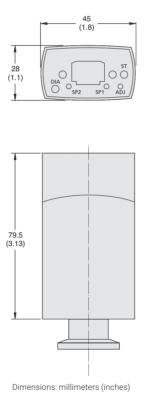


# PCG-750/PCG-752 Series Pirani Capacitance Diaphragm Gauges







The Agilent PCG-750 series active gauges, PCG-750 and PCG-752, combine Pirani and ceramic capacitance diaphragm sensors into a single design. These gauges provide gas-type independence and increased accuracy in the range from  $3.8 \times 10^{-5}$  to 1125 Torr ( $5 \times 10^{-5}$  to 1500 mbar).

Features	Benefits		
High accuracy and reproducibility at atmosphere	Reliable atmospheric pressure monitoring		
Fast atmospheric detection	Shortens process cycle times		
Gas-type independent above 10 mbar	Allows safe venting with any gas mixture		
Compact, rugged housing that mounts in any orientation with a logarithmic signal output	Ease of integration		
Set point control	Utilize pressure readings to perform critical operations		
Exchangeable plug and play sensor	Easy to repair with low cost of ownership		
Nickel filament option	Solution for corrosive applications		
Bright color LCD display option	Monitor pressure readings easily		



# **Technical Specifications**

Measurement range (Air, 0 <sub>2</sub> , CO, N <sub>2</sub> )		5 x 10 <sup>-5</sup> to 1500 mbar (3.8 x 10 <sup>-5</sup> to 1125 Torr)					
Accuracy	% of reading	Units					
	±50%	5 x 10 <sup>-5</sup> to 1 x 10 <sup>-3</sup> mbar (3.75 Torr to 1 x 10 <sup>-3</sup> Torr)					
	±15%	1 x 10 <sup>3</sup> to 100 mbar (1 x 10 <sup>3</sup> to 75 Torr)					
	±5%	100 to 950 mbar (75 to 712.5 Torr)					
	±2.5%	950 to 1050 mbar (712.5 to 787.5 Torr)					
Repeatability (N <sub>2</sub> )	% of reading	Units					
	±2.5%	1 x 10 <sup>3</sup> to 1100 mbar (1 x 10 <sup>3</sup> to 825 Torr)					
Admissible pressur	re	≤ 5 bar absolute					
Burst pressure		≤ 10 bar absolute					
Admissible temperature			on (ambient) to 50 °C	nt) Storage -20 to +65 °C		Bakeout at flange ≤ 80 °C	
Supply voltage		15 to 30 VDC @ < 0.8 A					
Output signal		0 to 10.23 V					
Measurement range	onge 0.61 to 10.23 V						
Voltage vs. pressur	re		1.286 V/decade				
Load impedance			> 10 kΩ				
Setpoint relay (2)		Range (N²)	Relay Contact	Hysteresis	Contact Rating Solid state relays	Contact Rating Mechanical relays	Switching time
		5 x 10-5 to 1500 mbar	n.o., potential free	10 % of threshold	≤30VDC/ ≤0.3ADC	≤30VDC/ ≤1ADC	≤30 ms
Interface (digital)		RS232C					
Electrical connection	on	RJ45/FCC 68, 8 pole female					
Materials exposed	to vacuum	PCG-750: W, Ni, NiFe, Al <sub>2</sub> O <sub>3</sub> , SnAg, SS, glass PCG752: Ni, NiFe, Al <sub>2</sub> O <sub>3</sub> , SnAg, SS, glass					

# **Ordering Information**

Description	Part Number		
PCG-750 Pirani/CDG combination gauge (tungsten), DN 16 ISO-KF	PCG750KF16		
PCG-750 Pirani/CDG combination gauge (tungsten) with setpoints and display, DN 16 ISO-KF (mbar)	PCG750KF16SD1		
PCG-750 Pirani/CDG combination gauge (tungsten) with setpoints and display, DN 16 ISO-KF (Torr)	PCG750KF16SD2		
PCG-750 Pirani/CDG combination gauge (tungsten) with setpoints and display, DN 16 ISO-KF (pascal)	PCG750KF16SD3		
PCG-750 Pirani/CDG combination gauge (tungsten) with setpoints and Profibus. DN 16 ISO-KF (mbar)	PCG750KF16SP		
PCG-752 Pirani/CDG combination gauge (nickel), DN 16 ISO-KF	PCG752KF16		
PCG-752 Pirani/CDG combination gauge (nickel) with setpoints and display, DN 16 ISO-KF (mbar)	PCG752KF16SD1		
PCG-752 Pirani/CDG combination gauge (nickel) with setpoints and display, DN 16 ISO-KF (Torr)	PCG752KF16SD2		
PCG-752 Pirani/CDG combination gauge (nickel) with setpoints and display, DN 16 ISO-KF (pascal)	PCG752KF16SD3		
PCG-752 Pirani/CDG combination gauge (nickel) with setpoints and Profibus, DN 16 ISO-KF (mbar)	PCG752KF16SP		
Accessories			
PCG-750 (tungsten) Replacement sensor –recommended for most applications	PCG750KF16RS		
PCG-752 (nickel) Replacement sensor –recommended for corrosive applications	PCG752KF16RS		
Power supply, PVG-PCG, International Voltage	AGPS45INT		
Active gauge cable for Turbo AG Controllers, TPS Mini/Compact, 3 meters	9699960		
Active gauge cable for Turbo AG Controllers, TPS Mini/Compact, 5 meters	9699961		

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