

Absolute Pressure 1000 to 5×10^{-4} mbar

⚙️ Description:

The Pirani sensor in the VCP64 works with the patented impulse ramp principle.

The VCP64 has an optimized temperature compensation, which leads to higher accuracy and excellent stability.

Analog, logarithmic output signal



⚙️ Benefits :

- Suitable for corrosive media
- High reliability
- Compact design for industrial applications
- High resolution, also in the rough vacuum range
- Excellent reproducibility
- High chemical resistance with platinum rhodium filament
- Durable, elastic Pirani helix filament
- Stable measurements due to optimized temperature compensation
- Suitable for UHV applications due to the robust metal sealed stainless steel sensor
- Filament protected by a metal screen provides good resistance against oil and solvent vapors
- Precise push button digital adjustment on zero pressure and atmosphere
- Logarithmic standard output 2.2 - 8.5 V
- Easy system integration and connection with PLCs, wide supply voltage range
- Rugged, EMI -proof metal housing
- Vacuum connection using stainless steel small flange DN 16 ISO-KF

⚙️ Typical Applications :

- Analysis instruments
- Applications with corrosive gases
- Coating plants
- Vacuum ovens
- Freeze drying
- Chemical engineering
- Safety circuits in vacuum systems and monitoring of fore vacuum
- Vacuum centrifuges

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Technical Data :

Measuring Principle	:	Heat conduction (Impulse Pirani), depending on gas type
Materials In Contact With Vacuum	:	Stainless steel 1.4307, nickel, glass, filament: platinum -rhodium
Measurement Range	:	1000 - 5×10^{-4} mbar ($750 - 5 \times 10^{-4}$ Torr), max. overpressure 4 bar absolute
Accuracy	:	1000 - 10 mbar: < $\pm 30\%$ from reading $10^{-1} \times 10^{-2}$ mbar: < $\pm 10\%$ from reading < 1×10^{-2} mbar: < factor 2
Repeatability	:	1×10^{-2} : $\pm 5\%$ from reading
Response Time	:	Max. 200ms
Voltage Supply	:	15 - 30 VDC
Electrical Connection	:	Hirschmann, 6 pole, male, lockable
Power Consumption	:	Max. 1.5 W with 24 VDC supply voltage
Operating Temperature	:	+5...+60°C
Storage Temperature	:	-40...+70°C
Max. Bake Out Temperature:		80°C at the flange
Output Signal	:	2.2 - 8.5 VDC, logarithmic, 1V / decade load resistance >10 kΩ
Vacuum Connection	:	Small flange DN 16 ISO-KF
Protection Class	:	IP40
Weight	:	Approx. 120g

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Product Codes :

VCP64MV

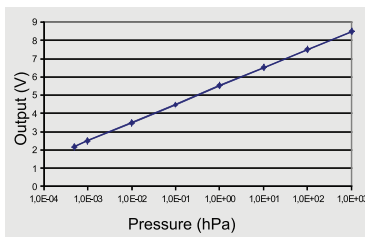
Pirani transducer, 1000 to 5×10^{-4} mbar, with DN 16 ISO-KF connection; Output 0 -10 V logarithmic

Accessories :

XB0600002 : Mating plug, 6pole, for VCP64MV

W0606002 : Measuring cable for VCP64MV with VD12, shielded, 2 m

W0606006 : As W0606006



$$V_{out} (V) = \log(p(\text{hPa})) + 5.5$$

$$p (\text{hPa}) = 10^{(V_{out}(V) - 5.5)}$$

Dimensions:

