VSP52

Vacuum Transducer
Absolute Pressure 1000...100 to 1x10^{-3} mbar

The VSP52 Pirani transducer is used for measuring absolute pressure in the fine vacuum range.

Its remarkable features include a minimized sensor volume (< 1 ccm) and excellent repeatability.
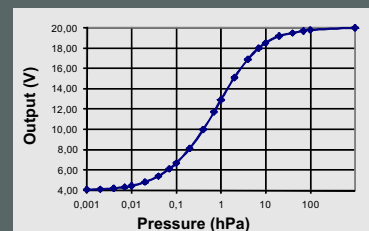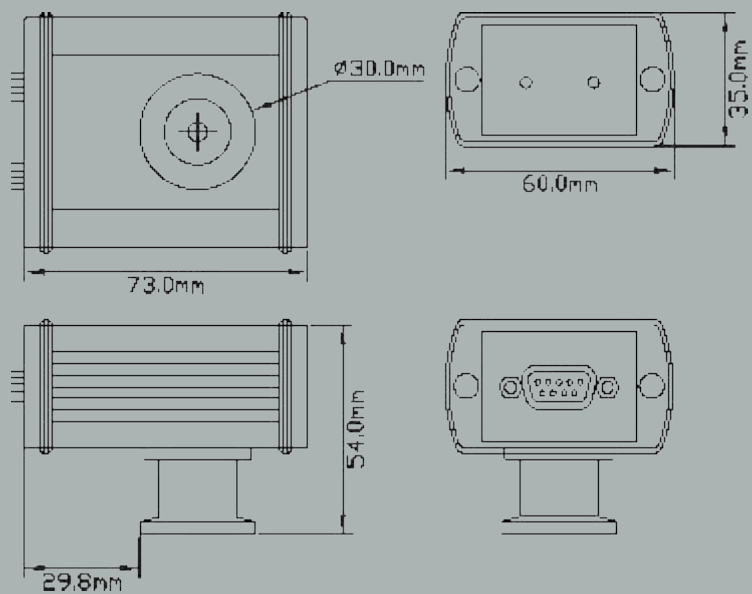
Signal output:
4 - 20 mA (three wire)

Typical Applications

- Analysis instruments
- Operation control at vacuum plants and pumps
- Vacuum drying
- Vacuum furnaces
- Freeze drying
- Appliance engineering
- Process engineering

Benefits

- High reliability
- Economical Pirani measuring principle
- Excellent reproducibility
- Durable Pirani filament
- Suitable for UHV applications due to metal sealed sensor
- Quick reaction to pressure changes
- Temperature compensated
- Easy readjustment at atmospheric and zero pressure with trim pots

- Standardized output signal
- Designed for industrial applications
- Robust metal housing with protection class IP54
- Vacuum connection over a stainless steel small flange DN 16 ISO-KF

Output (V) vs Pressure (hPa)

Technical Data

Measuring Principle	Pirani, depending on gas type
Materials In Contact With Vacuum	Stainless steel 1.4307, nickel, tungsten, glass
Measurement Range	1000...100 - 1 x 10^{-3} mbar (750...75 - 1 x 10^{-3} Torr), max. overpressure 4 bar absolute
Accuracy	1000 - 100 mbar: tendency 100 - 10 mbar: ‹ 30 % from reading 10 - 1 x 10^{-2} mbar: approx. 10 % from reading ‹ 1 x 10^{-2} mbar: ‹ factor 2
Repeatability	5%
Response Time	200 ms
Power Supply	8 - 16 VDC
Electrical Connection	SubD, 9-pole, female, lockable
Power Consumption	Approx. 50 mA
Operating Temperature	+10...+40°C
Storage Temperature	-20...+70°C
Max. Bake Out Temperature	80°C at the flange
Output Signal	4 - 20 mA (non linear, according characteristic) max. loop resistance 180 W / 8 VDC, 280 W / 15 VDC
Vacuum Connection	Stainless steel small flange DN 16 ISO-KF
Protection Class	IP54
Weight	Approx. 180 g

Product Codes

• **VSP52MA4**
Pirani transducer 1000...100 - 1 x 10^{-3} mbar with DN 16 ISO-KF connection; output 4 - 20 mA

Accessories:

• **W0900002**
Measuring cable, shielded, 2 m (for VD6 / VD9)

• **W0900006**
Measuring cable, shielded, 6 m (for VD6 / VD9)