

VSC42

Vacuum Transducer Absolute Pressure 1400 to 1 mbar

The VSC42 piezo transducer is used for measuring absolute pressure in the rough vacuum range.

Due to its durable ceramic sensor it is nearly insensitive to dirt and contamination.

Signal output:
4 - 20 mA (two wire)



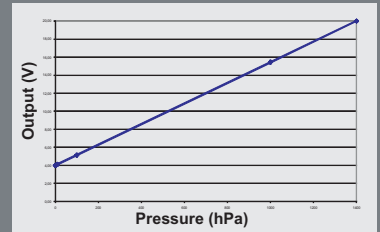
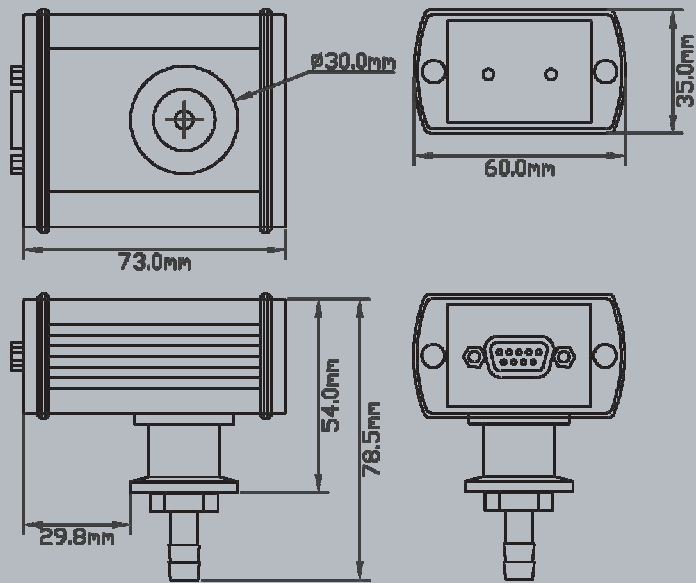
Typical Applications

- Appliance engineering
- Medical technology
- Packing machines
- Plant engineering
- Chemical process engineering
- Vacuum furnaces
- Operation control and documentation of vacuum plants and pumps
- Vacuum drying

Benefits

- Chemical resistant ceramic sensor with Viton® sealing
- High reliability and long term stability
- Short response time
- Temperature compensated
- Resistant to dirt
- Easy readjustment to atmospheric and zero pressure with trim pots
- Standardized output signal 4 - 20 mA (two wire), linear
- Easy connection to PLCs and other system controllers
- Designed for industrial applications
- Robust metal housing with protection class IP54
- Vacuum connection over a stainless steel small flange DN 16 ISO-KF with G1/4 female thread





$$\text{Iout (V)} = (\text{p(hPa)} / 87.5) + 4.0$$

$$\text{p (hPa)} = 87.5 (\text{Iout(mA)} - 4.0)$$

Technical Data

Measuring Principle	Piezo resistive, independent of gas type
Materials In Contact With Vacuum	Stainless steel 1.4305, Al ₂ O ₃ ceramic, Viton®
Measurement Range	1400 - 1 mbar (1050 - 1 Torr), max. overpressure 4 bar absolute
Accuracy	± 0,4 % full scale
Response Time	10 ms
Power Supply	9 - 30 VDC
Electrical Connection	SubD, 9-pole, female, lockable
Power Consumption	Max. 30 mA
Operating Temperature	+5...+50°C
Storage Temperature	-20...+70°C
Output Signal	4 - 20 mA, two wire (linear, 20 mA / 1400 mbar) max. loop resistance: $R_L = (\text{supply voltage} - 9V) / 20 \text{ mA}$
Vacuum Connection	Stainless steel small flange DN 16 ISO-KF with G1/4 female thread
Protection Class	IP54
Weight	Approx. 170 g

Product Codes

- **VSC42MA4**
Piezo transducer 1400 - 1 mbar with DN 16 ISO-KF flange; G1/4 female thread; output 4 - 20mA (two wire)

Accessories:

- **VD81SW1**
Hose nozzle brass, nickel plated
- **W0900002**
Measuring cable, shielded, 2 m (for VD6/VD9)
- **W0900006**
Measuring cable, shielded, 6 m (for VD6/VD9)