

VSP - Analogline Vacuum Transducer Pirani

Absolute Pressure 1000 to 1×10^{-4} mbar



VSP at a glance

- Durable, elastic Pirani helix filament
- Patented impulse Pirani with extended measuring range; very high resolution also in the rough vacuum range
- Integrated metal facing for protection against contamination like oil vapours or solvent vapours
- Highest reliability
- Excellent reproducibility
- UHV suitable due to metal sealed stainless steel measuring cell (He leakage rate $<5e-10$ mbar l / s)
- Overpressure stability up to 16 bar
- Analog standard output 0 - 10 V (VSP63MV, VSP64MV) or 4-20 mA (VSP63MA4), logarithmic
- Suitable for 1 and 2 channel controller VD6 / VD12
- Precise, digital adjustment to zero pressure and atmosphere at the push of a button
- Stable, reproducible measurement values due to optimized temperature compensation

VSP - Analogline Vacuum Transducer Pirani

Absolute Pressure 1000 to 1×10^{-4} mbar



Technical Data

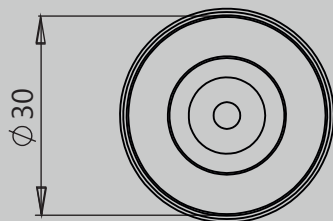
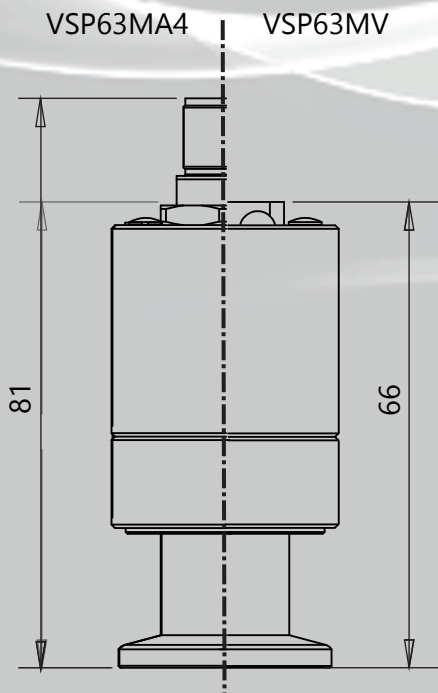
| | |
|-----------------------------|---|
| Measuring Principle | Heat conduction (pat. Impulse Pirani), depending on gas type |
| Measurement Range | 1000 - $1e-4$ mbar (750 - $1e-4$ Torr) |
| Max. Overload | 10 bar absolute optional: 16 bar abs. (with CERT31P) |
| Materials with Vac. Contact | Stainless steel 1.4307, tungsten, nickel, glass |
| Accuracy | 1000 - 20 mbar: < 30% from reading, 20 - 0,002 mbar: < 10% from reading |
| Repeatability | 20 - 0,002 mbar: 2% from reading |
| Response Time | < 200 ms |
| Voltage Supply | 15 - 30 VDC |
| Power Consumption | Max. 1.0 W with 24 VDC supply voltage (VSP63MV/VSP64MV) max. 1.5 W with 24 VDC supply voltage (VSP63MA4) |
| Electrical Connection | Hirschmann, 6 pole, male, lockable (VSP63MV/VSP64MV) M12 A, 5pole, male, lockable (VSP63MA4) |
| Operating Temperature | +5...+60°C |
| Storage Temperature | -20...+70°C |
| Max. Bake Out Temperature | Max. 150°C at the flange (transducer separated from voltage supply) |
| Output Signal | VSP63MV/VSP64MV: 0 - 10 VDC, load > 10 kΩ range 1.5 - 8.5 VDC, logarithmic (1V/decade) VSP63MA4: 4 - 20 mA, logarithmic |
| Vacuum Connection | Small flange DN 16 ISO-KF (VSP63MV, VSP63MA4), conflat flange DN 16 CF (VSP64MV) |
| Protection Class | IP54 (VSP63MA4), IP40 (VSP63MV, VSP64MV) |
| Weight | 120 g (VSP63MA4), 98 g (VSP63MV), 135 g (VSP64MV) |

VSP - Analogline Vacuum Transducer Pirani

Absolute Pressure 1000 to 1×10^{-4} mbar



Dimensions in mm



Model designations

- VSP63MV DN 16 ISO-KF connection output 0 - 10 V, log.
- VSP64MV DN 16 CF connection output 0 - 10 V, log.
- VSP63MA4 DN 16 ISO-KF connection output 4 - 20 mA, log.

Sets

- VD64P115 Set (115 VAC) with 1 channel controller
VD6S2230 + VSP63MA4 + measuring cable 2 m
- VD64P230 Set (230 VAC) with 1 channel controller
VD6S2230 + VSP63MA4 + measuring cable 2 m
- VD124P Set mit 2 channel controller
VD12 + VSP63MV + measuring cable 2 m

Accessories

- CERT31P
overpressure stability 16 bar, incl. testing certificate 3.1
- XB0500004
Mating plug, 5pole, for VSP63MA4
- XB0600002
Mating plug, 6pole, for VSP63MV/VSP64MV

Further accessories as well as detailed information about our product family can be found in our Analogline brochure.