

VSP - Analogline Vacuum Transducer Pirani

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



VSP at a glance

- Durable Pirani helix filament
- Wide measuring range and high resolution in the rough vacuum range
- Metal screen for the filament's protection provides good resistance against oil and solvent vapors
- High reliability
- Excellent reproducibility
- Suitable for UHV applications due to the robust metal sealed stainless steel sensor
- Highly cost effective
- Logarithmic standard output 1.5 - 8.5 V (VSP63MV, VSP64MV) or 4-20 mA (VSP63MA4)
- Suitable for Thyracont 1 and 2 channel controllers VD6 / VD12

Features of the Analogline product family

- Stable, reproducible measurement values due to optimized temperature compensation
- Precise, digital push button digital adjustment of zero pressure and atmosphere
- Costsaving
- Easy connection to PLCs and other system controllers
- Extremely compact, designed for industrial applications

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Technical Data

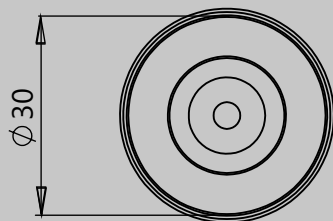
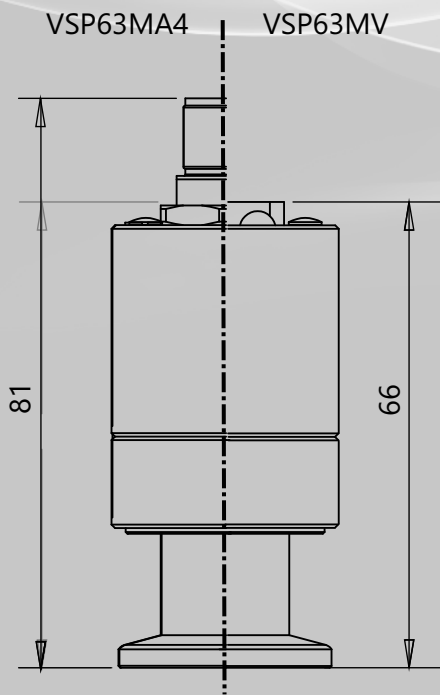
Measuring Principle	Heat conduction (Impulse Pirani), depending on gas type
Measurement Range	1000 - 1e-4 mbar (750 - 1e-4 Torr)
Materials with Vac. Contact	Stainless steel 1.4307, tungsten, nickel, glass
Max. Overload	10 bar absolute
Accuracy	1000 - 20 mbar: < 30% from reading 20 - 0,002 mbar: < 10% from reading
Repeatability	20 - 0,002 mbar: 2% from reading
Response time	< 200 ms
Voltage Supply	15 - 30 VDC
Electrical Connection	M12 A, 5pole, male, lockable (VSP63MA4) Hirschmann, 6 pole, male, lockable (VSP63MV/VSP64MV)
Power Consumption	Max. 1.5 W with 24 VDC supply voltage (VSP63MA4) max. 1.0 W with 24 VDC supply voltage (VSP63MV/VSP64MV)
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	VSP63MA4: 4 - 20 mA, logarithmic VSP63MV/VSP64MV: 0 - 10 VDC, load > 10 kW range 1.5 - 8.5 VDC, logarithmic (1V/decade)
Vacuum Connection	Small flange DN 16 ISO-KF (VSP63MA4, VSP63MV), conflat flange DN 16 CF (VSP64MV)
Protection Class	IP54 (VSP63MA4), IP40 (VSP63MV, VSP64MV)
Weight	120 g (VSP63MA4), 98 g (VSP63MV), 135 g (VSP64MV)

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Dimensions in mm



Model designations

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

- XB0500004
Mating plug, 5pole, for VSP63MA4
- XB0600002
Mating plug, 6pole, for VSP63MV/VSP64MV
- W0509002
Measuring cable for VSP63MA4 with VD6, shielded, 2 m
- W0509006
Measuring cable for VSP63MA4 with VD6, shielded, 6 m
- W0606002
Measuring cable for VSP63MV/VSP64MV with VD12,
shielded, 2 m
- W0606006
Measuring cable for VSP63MV/VSP64MV with VD12,
shielded, 6 m

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Thyracont Vacuum Instruments GmbH

Max-Emanuel-Straße 10

94036 Passau, Germany

Phone: +49 (0)851 95986 0

Email: info@thyracont-vacuum.com

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