VD84 - Compact Vacuum Meter Pirani, Datalogger
Absolute Pressure 100 to 1 x 10^{-3} mbar

VD84 at a glance

- Pirani sensor with durable, elastic helix filament

- Stable measuring values due to optimized temperature compensation

- External, detachable sensor with stainless steel small flange DN 16 ISO-KF or 1/8" NPT male thread, connected by spiral cable (1.20 m)

- Excellent reproducibility

- Integrated metal facing protects the sensor against contamination like oil vapours or solvent vapours

- Gas type correction factors for correct pressure readings

- UHV suitable due to metal sealed stainless steel measuring cell (He leakage rate <5e-10 mbar l / s)

- Operation with battery or power supply for mobile use and fixed installation

- Integrated data logger for up to 2000 measurement values

- Pressure units mbar, Torr, hPa

- USB interface for easy push button data transfer to PCs, but no PC connection is necessary during measurements

VD84 - Compact Vacuum Meter Pirani, Datalogger
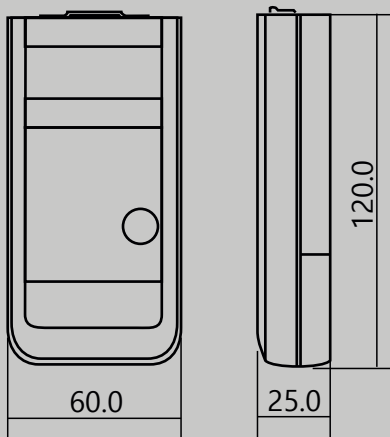## Absolute Pressure 100 to 1 x 10^{-3} mbar

Technical Data

Measurement Principle	Heat conduction Pirani (gas type dependent)
Measurement Range	100 - 1e-3 mbar (75 - 1e-3 Torr)
Max. Overload	4 bar absolute
Accuracy	100 – 20 mbar: <30% f.r. (f. reading 20 - 1e-2 mbar: 10% f.r. (f. reading)
Resolution	100 - 10 mbar: 1 mbar, < 10 mbar: 2 digits mantissa, 1 decimal place
Measurement Rate	1.0 s
Logging Rate	1 ... 6000 s
Materials With Vac. Contact	Stainl. steel 1.4305, nickel, tungsten, glass
Operating Temperature	+5...+50 °C
Storage Temperature	-20...+60 °C
Power Supply	9 V battery or 12...15 VDC external
Power Consumption	Approx. 110 mW (clocked)
Operating Time	Li-battery: <100h, 6LR61 Alkaline:<40h
Serial Interface	Mini-USB, Type B, 5pin, female, Virtual Com Port protocol
Electrical Connection	Mini-jack 2.5 mm for plug-in power supply
Vacuum Connection	Stainless steel small flange DN16 ISO KF or 1/8" male thread
Display	LCD 12 mm
Protection Class	IP40
Weight	Approx. 200 g (battery included)

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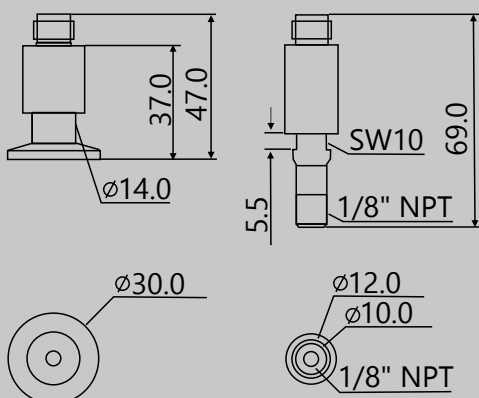## Absolute Pressure 100 to 1×10^{-3} mbar

Dimensions in mm

120.0

60.0 25.0

37.0
47.0
Ø14.0

Ø30.0

SW10
1/8" NPT
5.5
69.0

Ø12.0
Ø10.0
1/8" NPT

Model designations

▪ VD84/1   Compact vacuum meter with probe type VSP841 DN 16 ISO-KF flange

▪ VD84/2   Compact vacuum meter with probe type VSP842 1/8" NPT male thread

▪ VSP841   Passive (external) Pirani sensor DN 16 ISO-KF flange

▪ VSP842   Passive (external) Pirani sensor 1/8" NPT male thread

Accessories

▪ VD8ZUB   accessory set consisting of:
VD8CASE	protective plastic case
VD8N4	power supply 15 V, incl. change-over plug, EURO, US, UK, AUS
VD8ALK	alkaline battery 9 V (vacuum tested);
WUSB0002	interface cable, 2 m, USB;
VGR	VacuGraph™ software

Further accessories as well as detailed information about our product family can be found in our VD8 brochure.