VD83 - Compact Vacuum Meter Pirani, Datalogger
Absolute Pressure 100 to 5 x 10^{-4} mbar

VD83 at a glance

- Temperature compensated, metal sealed Pirani sensor with durable helix filament

- Vacuum connection by small flange DN16 ISO-KF

- High accuracy

- Excellent repeatability

- Superior sensor protection against condensed solvents

- High battery life due to clocked measurement

- Gas correction factors for immaculate pressure readings

Features of the VD8 product family

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

- Display for direct reading of measurement data

- Data logger: save up to 2000 measurements in the vacuum meter

- Versatile and easy to use

- Operating modes: continuous operation for long-term measurements or automatic switch off for battery saving

- Setting option: storage of minimum and maximum pressures

- Long battery lifetime thanks to clocked measurements

- Pressure units mbar, Torr, hPa

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

- Easy configuration and readjustment of the vacuum meter by VacuGraph^{TM} software or directly on the gauge

- VacuGraph^{TM} Windows software to visualize, analyze and save measurements

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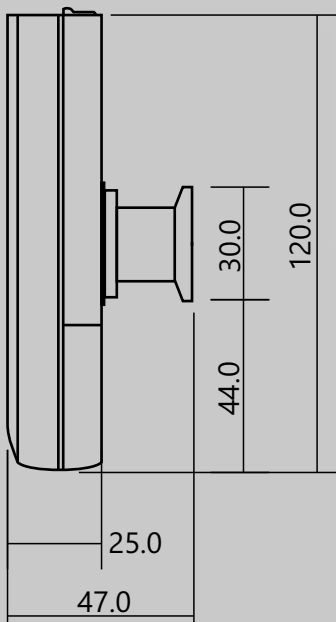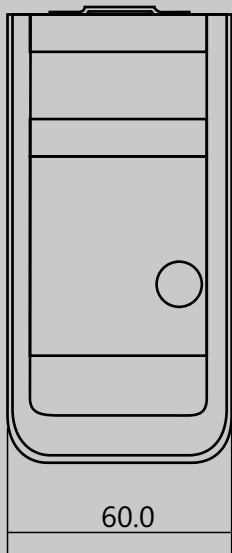## Absolute Pressure 100 to 5 x 10^{-4} mbar

Technical Data

Measurement Principle	Heat conduction Pirani (gas type dependent)
Measurement Range	100 - 5e-4 mbar (75 - 5e-4 Torr)
Max. Overload	4 bar absolute
Accuracy	100 – 20 mbar: <30% f.r. (f. reading)
	20 - 2e-3 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 (0.1 s if logging rate is set accordingly)
Logging Rate	0.1 s, 1 ... 6000 s
Materials With Vac. Contact	Stainless steel 1.4307, 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. 110mW (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	Small flange DN16 ISO KF
Display	LCD 12 mm
Protection Class	IP40
Weight	Approx. 200 g (battery included)

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Dimensions in mm

60.0

120.0

30.0

44.0

25.0

47.0

Model designations

- VD83   Compact vacuum meter
  DN 16 ISO-KF with G 1/4 female 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 Windows® software

For further accessories and information see our VD8 brochure.

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