



## Compact Vacuum Meter / Data Logger

**Absolute Pressure 100 - 0.001 mbar (Torr)**

**VD84M**

The digital Pirani vacuum meter VD84M with exchangeable sensor head reads absolute pressure in the fine vacuum range.

It is optionally available with infrared interface and can be used as data logger.

The VD84M can be operated with either battery or plug in power supply making it ideal for portable or stationary applications



### Typical Applications

- ▶ Check and setup of vacuum appliances
- ▶ Operation control and documentation at vacuum plants and pumps
- ▶ Service and maintenance
- ▶ Modern teaching aid with PC interface
- ▶ Monitoring of vacuum insulations
- ▶ Vacuum centrifugation
- ▶ Coating plants
- ▶ Chemical process engineering
- ▶ Vacuum evaporators

### Your Benefits

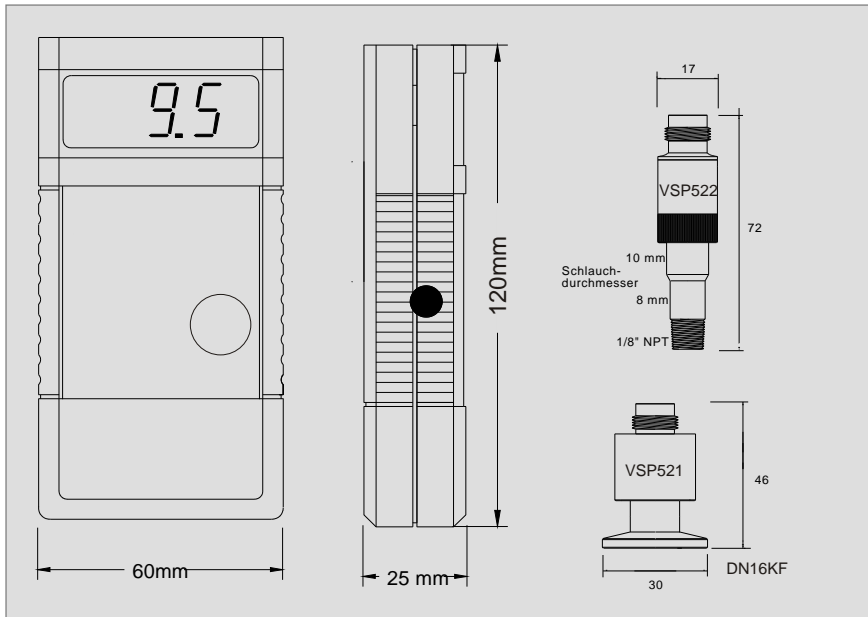
- ▶ Plug connection to external sensor
- ▶ Mobile meter can be used with multiple sensors
- ▶ Easy to use
- ▶ Excellent reproducibility
- ▶ Temperature compensated sensor with robust helix filament
- ▶ Long battery life due to clocked measurement
- ▶ Pressure units mbar, Torr, hPa
- ▶ Extensively sensor protection against condensing solvents
- ▶ Exact and easy readjustment by push of a button
- ▶ Choice between automatic switch off and continuous operation
- ▶ Bidirectional infrared interface (VD84MIR)
- ▶ Online data transfer to PC (VD84MIR)
- ▶ Data logger function: save measurements in the vacuum meter and afterwards transfer data to PC by push of a button (VD84MIR)
- ▶ Min/Max memory; Storage and display of high and low values
- ▶ Software VacuGraph for saving and plotting measurements on a PC
- ▶ Stainless steel small flange or screw in NPT thread hose nozzle



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## VD84M



### Technical Data

Measurement Principle	Pirani, depending on gas type
Materials In Contact With Vacuum	Stainless steel, tungsten, nickel
Measurement Range	100 - 0,001 mbar (750 - 0,001 Torr) admitted overload: 4 bar abs.
Accuracy	Depending on range 100 - 10 mbar: ca. 30 % from reading 10 - 0,01 mbar: < 15 % from reading < 0,01 mbar: < factor 2
Measuring Rate	1,6 s
Operating Temperature	5 ... 50°C
Storage Temperature	-20 ... +60°C
Power Supply	9V block battery (alt. NiCd-accu) or 12 VDC external (plug in power supply)
Power Consumption	Approx. 110 mW (clocked measurement) additionally 25 mW during data transfer
Electrical Connection	Jack for external mains adapter
Vacuum Connection	DN 16 KF or 1/8" NPT thread
Operation Time (without data transfer)	max. 100 h mit 9V Lithium battery max. 40 h mit 9V Alkali-Mangan battery
Display	LCD 12mm
Infrared Interface	VD84MIR only: range 1.2 m
Data Memory	VD84MIR only: approx. 1000 values
Weight	Approx. 200 g (incl. battery, without probe)

### Article Numbers

#### ▶ VD84M/1

Digital compact vacuum meter with probe type VSP521, DN16KF flange

#### ▶ VD84M/2

Digital compact vacuum meter with probe type VSP522, 1/8" NPT thread, stainless steel

#### ▶ VD84MIR/1, VD84MIR/2

As above, additional IR interface

Accessories:

#### ▶ VD8CASE

Protective case

#### ▶ VD8ALK

AlMn battery, 9V-Block 6LR61

#### ▶ VD8N2

Plug in power supply

#### ▶ VD8IRA

IR-adapter for serial PC-interface

#### ▶ VD8ANS

Connection set with tee DN16KF, 2 centering rings and 2 clamps

#### ▶ VGR

VacuGraph Windows software

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