

VG64

DIGITAL VACUUM GAUGE

FEATURES

- Reads vacuum in 7 international units
- Uses ½ the battery power than other models
- Cleaning port provides quick cleaning and drying of sensor
- Uses standard 9V Alkaline battery
- Convenient built-in hanger

OPERATING CONTROLS

- Turning the vacuum gauge ON: Press and hold the ON button for about 3 seconds, until "SUPCO VG64" appears on the display.
- Turning the vacuum gauge OFF: Press the OFF button. To prolong battery life, when vacuum reading is above 12,000 Microns for about 10 minutes, the VG64 will automatically turn OFF.
- Changing the scale: Press the Scale button to change the display to the next scale. The scale order is: Microns, PSI, Inches of mercury (InHg), milliBars, Pascals, Torr and milliTorr. VG64 will keep the scale settings even if the power is turned OFF.

UNDERSTANDING THE DISPLAY

- When the vacuum reading is above 12,000 Microns (1,600 Pascals), the first line of the display shows "Atm." The second line displays a bar graph to indicate the direction in which the vacuum is moving. When the bar graph is moving from left to right, the pressure is increasing. When the bar graph is moving from right to left, the pressure is decreasing. The speed of the bar graph indicates how fast the pressure is increasing or decreasing. The bar graph indicator may be inaccurate for a few seconds after the evacuation of the system has begun.
- The bar graph disappears if the vacuum does not change for about 10 seconds.
- When the vacuum reading is below 12,000 Microns (1,600 Pascals), the vacuum in the selected units is displayed.



CONNECTING THE VG64 TO THE VACUUM SYSTEM

The VG64 should only be connected to the vacuum system at the vacuum port. The "Auxiliary Port" is primarily for cleaning and should normally be closed with the supplied cap.

CLEANING THE VG64 VACUUM SENSOR

It is recommended that the VG64 sensor be cleaned periodically to maintain unit accuracy. Oil and other contaminants reduce the accuracy of the VG64 unit. Follow the instructions below for cleaning.

- Close the Vacuum port with the supplied cap. Open the Auxiliary port.
- Use an eyedropper to pour about 2 teaspoons of ordinary rubbing alcohol into the Auxiliary port.
- Close the Auxiliary port with the supplied cap. Both the Vacuum and Auxiliary ports should now be closed.
- Shake the VG64 unit for about 10 seconds. A slight movement of the vacuum sensor in the case is normal and does not affect the internal connection in any way.
- Open both the Vacuum and the Auxiliary ports. Empty the alcohol, and air dry the sensor.
- Close both the Vacuum and the Auxiliary ports with the supplied caps when the VG64 is not used. This prevents contamination of the sensor.

VG64 SPECIFICATIONS

Display	Updated every ½ second. 1 micron resolution below 200 micron of vacuum
Sensor Type	Thermistor
Connector Type	Standard ¼ inch male flare fitting
Vacuum Range	0 – 12,000 Microns (0 – 1,600 Pascals) with vacuum increasing/decreasing indicator when above 12,000 Microns
Scale	Microns, PSI, InHg, milliBars, Pascals, Torr, milliTorr
Operating Temp.Range	35°F to 125°F (2°C to 52°C)
Overpressure	300 PSI max (20 Bar)
Accuracy	+/-10% (0 to 1000 microns)
Power Source	9 Volt Alkaline battery (not included)
Continuous Usage	Over 35 hours
Auto Shut off	After 10 minutes when vacuum reading is above 12,000 Microns (12 Torr)
Weight	6.7 ounces
Dimensions	5½"H X 3"W X 1¼"D

SUPCO VG64 VS. J.B. DV-22 COMPARISON CHART

	DV-22
Fast update rate. The display updates every 1/2 second	Update rate very slow. The display updates every 15-30 seconds.
High resolution step of 1 micron, when the pressure is below 200 microns.	Very low resolution. 75 micron steps when the pressure is below 200 microns.
Vacuum is displayed in 7 international scales.	Vacuum is displayed in microns only.
High vacuum range 0-12,000 microns.	Vacuum range is only 0-5000 microns.
When vacuum is out of range, our unit shows a bar graph that tells whether the pressure is increasing or decreasing.	When vacuum is out of range there is no indication if the system is evacuating or leaking.
Low power dissipation. On a fresh alkaline 9V battery the unit will run about 42 hours continuously.	On a fresh alkaline 9V battery the unit will run about 23 hours continuously.
Cleaning port allows for much faster sensor cleaning and drying.	No cleaning port.
Out of temperature range indicator.	No out of temperature range indicator.
Good accuracy at higher pressures (above 300 microns)	Low accuracy is masked by increasing the step to 200 microns.
10 minute auto shut off only when no vacuum is detected.	10 minute shut off at all times, even if the system is under test.
Self diagnostic and sensor dirty indicator ¹ .	Not self diagnostic.

¹ Future product enhancement.

VG64 STEP TABLE

Vacuum (microns)	Micron (mTorr) Step	Pascal Step	Bar Step	InHg Step	PSI Step
15000 - 8000	1000	100	1	0.05	0.02
8000 - 5000	500	50	0.5	0.02	0.01
5000 - 2000	250	25	0.25	0.01	0.005
2000 - 1000	50	5	0.05	0.002	0.001
1000 - 500	10	1	0.01	0.0005	0.0002
500 - 200	5	0.5	0.0005	0.0002	0.0001
200 - 0	1	0.1	0.0001	0.00005	0.00002

