DSZH®

WK-VG88

HIGH QUALITY VACUUM METER

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VACUUM METER INTRODUCTION

The purpose of system vacuum pumping is to remove the air and moisture air from system before filling refrigerants. If not, moisture air may mix with refrigerants and chemical action may happen, System may be damaged after long time running under this condition. So vacuum pumping is one of the most important processes in filling refrigerants. Digital vacuum meter can show accurate vacuum(≥7.5 microns, resolution 0.1 micron) in system which normal manifold gauges can't (normal mechanical manifold gauges can show limited vacuum -2 inHg, it's approx 50,800 microns). Effective reduction of Moisture air level in system will start when system vacuum pressures are lower than 700 microns. Filling refrigerants can be started only when system vacuum pressures are lower than 500 microns and 300 microns will be the best status for refrigerant filling which normal mechanical manifold gauge will never reach and show on scale.

DSZH® brand: **WK-VG88** Vacuum Meter is built with a high quality thermocouple sensor and microcomputer. This unit has measurement capability ranging from atmosphere to 0.1 micron.

WK-VG88 can be used for high vacuum of refrigeration system, leaking detection, judging vacuum pump in quality.
Thanks for purchasing our products!

SPECIAL FEATURES

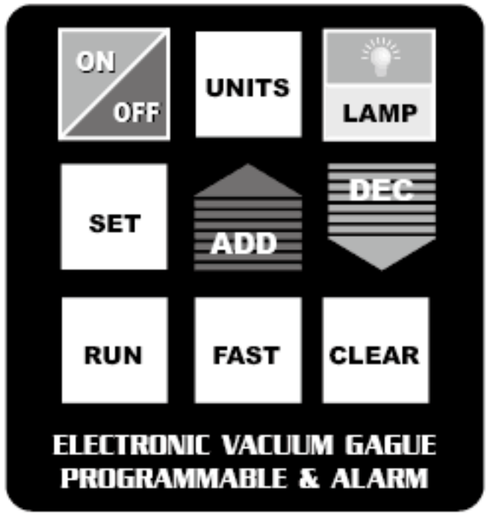
★Testing deep vacuum of system (ultimate vacuum 7.5 microns)
★Testing vacuum leakage of system
★Testing to identify vacuum pump quality
★Target pressure alarm setting
★Automatic Warm-up
★Battery Indicator
★Automatic calibration when power on
★Heavy Duty Hook folds back into unit for compact storage
★Auto-Off after 10 minutes idle time

SPECIFICATIONS

- Response Time: 250 mSec.
- Sensor: Thermocouple sensor
- Connection Fitting: 1/4" flare female adapter
- Operating Temperature: 32 to 120°F (0 to 45°C)
- Battery Life: 60 hours
- Vacuum Units: Pa, mBar, mmHg, Torr, mTorr, Microns
- Range: 37.500 to 1 micron
- Accuracy Range*:

Pressure Range	Accuracy
100~1 Micron	± 5% of reading
1000~100 Micron	± 7% of reading
1000 Micron ~ATM	± 10% of reading

*Unit accuracy was established using a calibrated instrument with NIST traceability.



ON/OFF: power ON/OFF
UNITS: units selector
LAMP: LCD back-light
SET: vacuum level setting mode.
ADD: increase the value in setting mode.
DEC: decrease the value in setting mode.
RUN: start
FAST: digit position selector in setting mode.
CLEAR: zero out

BATTERY INSTALLATION

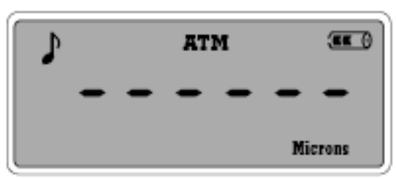
Remove battery compartment cover.
Make sure to place the battery into the compartment with the correct polarity. Replace battery cover.

Single digital manifold refrigerant charging operation instruction:

• Press the **ON/OFF** button to turn the unit ON.The unit will warm-up by displaying

for 2 seconds & then

will be displayed and move from right to left for 5 seconds.



will be displayed when the unit is ready.

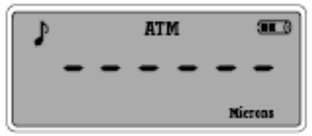
AUTO-OFF :
The unit is set to power off after idle time of 10 minutes.

UNIT SELECTION:
Press the UNIT button to select the desired unit. Default unit MICRON will be displayed every time when power on.

VACUUM LEVEL TARGET SETTING:
1.Press SET button enter into setting mode.
2.In setting mode, press SET button will quit.
3.Press FAST button to select digit position. When digit position was selected, it's will twinkle.
4.Press ADD button to increase the value and press DEC button to decrease the value.
5.Press CLEAR button to zero out the value.
6.Press RUN button to start.

OPERATIONS

• Press the **ON/OFF** button to turn the unit on. The unit will warm-up.



will be displayed when the unit is ready.

• Once warm-up is complete, connect the Vacuum meter to the system and start the vacuum pump . The vacuum countdown willstart from atmospheric pressure (ATM) ------.Depending on the size of the system it may take some time for the numeric vacuum reading to appear on the LCD. The numbers descend from 20,000 Microns or corresponding units. Once the target level is reached and passed the indicator light will come on with buzzer alarm. the gauge will power off after 10 minutes. Simply press the ON/OFF button and allow 30 seconds for warm-up and true vacuum reading to appear.
• Press the **ON/OFF** button to turn the unit off.

IMPORTANT NOTE REGARDING VACUUM LEAK TEST:

When checking a system for leaks under high vacuum (less than 1000 microns), connect the vacuum gauge directly to the system. If additional connections are required use copper tubing (do not use rubber hoses) and high vacuum shut-off valves. Standard hoses and manifold gauge set shut-off valves may have a small amount of leakage under high vacuum. When initiating a high vacuum test, the vacuum gauge reading may "drift" higher until the system has equalized. After this short stabilization period (5 minutes) the vacuum reading should hold steady. An upward "drift" of the vacuum meter reading may indicate a leaking system.

WARNING!! Never stop the vacuum pump unless the vacuum meter is disconnected from the system. Failure to do so may create a higher pressure in the system that can cause oil to enter the sensor chamber.

CLEANING THE SENSOR

Observe the gasket after each vacuum. If oil is present, it is possible that there is a presence of oil in the sensor chamber. Follow these instructions:

1. Disconnect the sensor chamber from the socket.
2. Remove the gasket & depressor from the assembly to clean.
3. Clean the gasket. Rinse the sensor chamber with acetone. Repeat until the oil is completely removed. Allow 2 – 4 hours for all of the parts to dry and evaporate.
4. Reassemble all of the parts and check the unit.

TROUBLESHOOTING

No Display:
Check the battery and polarity.

WARNINGS

Wear Safety Glasses. Wear Gloves.
Keep in a dry place. Do not allow moisture to enter the unit.

WARRANTY

This product warrants against defects in material and workmanship for a period of one year. This warranty does not cover failure due to abuse, improper usage, or progressive wear and tear.

Warranty becomes valid to the original user, effective on the puchase date.