



EVDL-4 Piezoresistive Vacuum Gauge

The EVDL-4 piezoresistive vacuum gauge is regulated by a special varistor gauge, which uses imported sensors and digital panel table to display the pressure value. The vacuum gauge reading is not affected by gas composition, corrosion resistance, small zero deviation, high measurement accuracy, it is suitable for coarse and low vacuum measurements.

Product Model	EVDL-4 Piezoresistive vacuum gauge
Matching Regulation	Custom metal regulation
The regulatory interface	φ15, KF16, KF25, KF40, CF16, CF35 etc
Measuring range	10Pa - 100KPa
Power supply	AC 220V, 50Hz
Power	5W
Weight	1Kg
Case size	Length/Width/Height: 90/90/160/(mm)
Performance feature	LED red digital display is clear, stable performance, simple structure, high measurement accuracy, reading and gas species irrelevant
Optional Function	1. 0-5v / 0-10v / 4-20mA analog output; 2. RS232/RS485 serial port output; 3. Vacuum setting; 4. Multi-station circuit detection;

Operating instructions:

1. Connect the regulation to the vacuum system, connect the regulated cable and power cable, and turn on the power switch and the panel table shows the pressure values. When the work is finished, turn off the power switch.
2. Zero adjustment: when the vacuum system pressure is less than 1Pa, adjust the torque of the potentiometer on the rear panel to make the pressure indicator is zero.

Note: The vacuum gauge and the vacuum gauge number should correspond. When the vacuum gauge is working, high-voltage and high-frequency equipment is prohibited nearby to prevent damage to the instrument. If it must be used, please turn off the vacuum gauge and remove the cable before opening the high voltage and high frequency equipment.

Matching Regulation:



← EVDL4 Special Piezoresistive Gauge



EVDL-5 Ionization vacuum gauge

The EVDL-5 ionization vacuum gauge adopts ZJ-10B ionization gauge. The vacuum gauge has the characteristics of reliable performance, stable data and simple operation. It is suitable for the measurement and control of high vacuum.

Product Model	EVDL-5 Ionization vacuum gauge
Matching Regulation	ZJ-10B
The regulatory interface	φ 15、KF16、KF25、KF40、CF16 、CF35 etc
Measuring range	$1 \times 10^{-4} - 10 \text{ Pa}$
Anode to Ground Potential	165V
Cathode-to-ground potential	35V
Power Supply	AC 220V ,50Hz
Power Consumption	22W
Weight	5.7Kg
Case size	Length/Width/Height: 240/89/250(mm) Length/Width/Height: 480/89/250(mm)
Performance Feature	LED red scientific calculation method shows reliable performance, stable data, automatic protection over range.
Optional Function	(1) Analog output of 0-5V/0-10V/4-20mA; (2) Print the pressure value regularly; (3) AS232 (standard BPS9600)/RS485 serial port output; (4) Vacuum setting; (5) Multi-station inspection; (6) Remote control, the longest distance 250 meters to measure the system pressure value.

Tip: when connecting the gauge with the cable, align the locating pin, and the chassis should be grounded. Do not use the high-frequency spark leak detector near the ionization gauge. If you want to use it, please remove the ionization gauge cable and use it. It is forbidden to turn on the air.

Matching regulation:

ZJ10→





EVDL-6 Resistance vacuum gauge

The EVDL6 resistance vacuum gauge (Pirani) uses a custom ZJ52 resistor gauge with advanced large scale integrated circuits and high performance ICs to ensure the accuracy and reliability of vacuum measurement data, up to 7 orders of magnitude. It has a wide range of applications in rough and low vacuum.

Product Model	EVDL-6 Resistance vacuum gauge
Matching Regulation	Custom ZJ52 resistor regulation
The regulatory interface	φ 15、KF16、KF25、KF40、CF16 、CF35 etc
Measuring range	0.01Pa - 100KPa(after adjusting the atmospheric zero)
Power Supply	AC 220V ,50Hz
Power Consumption	5W
Weight	1Kg
Case size	Length/Width/Height: 90/90/160/(mm) Length/Width/Height: 180/90/180/(mm)
Performance Feature	LED red digital display, stable performance, wide measurement range, wide application range.
Optional Function	(1) 0-5v / 0-10v / 4-20mA simulation output; (2) timed printing pressure value; (3) RS232 (standard BPS9600) (RS485 serial output); (4) vacuum setting;

Tip: If the user does not have a 10e-3pa vacuum environment, do not use zero point calibration (in order to prevent the user from misoperation, zero point calibration key is built into the cabinet by default). The vacuum gauge should be placed vertically. If horizontal placement is required, please inform the manufacturer in advance. Regulate the filament is thin, regulate not cicada, do not have strong vibration when working. Note that the vacuum gauge should correspond to the number of the vacuum gauge. When the vacuum gauge works, it is forbidden to use high voltage and high frequency equipment nearby to prevent instrument damage. If it is necessary to use, turn off the vacuum gauge and take off the cable before opening the high voltage and high frequency equipment.

Matching Regulation:



Custom ZJ52 F



EVDL-7 Ionization vacuum gauge

The EVDL7 ionization vacuum gauge is zj-12 ionization gauge. The vacuum gauge has the characteristics of reliable performance, stable data and simple operation, and is suitable for ultra-high vacuum measurement and control.

Product Model	EVDL-7 Ionization vacuum gauge
Matching Regulation	CF35 Flanged or Straight Inserted 15.5 Glass ZJ-12 Ionization Gauge
Measuring range	6x 10 ⁻⁸ - 10 ⁻² Pa
Anode to Ground Potential	235V
Cathode-to-ground potential	35V
Power Supply	AC 220V, 50Hz
Power Consumption	22W
Weight	5.7Kg
Case size	Length/Width/Height: 480/132/200(mm) Length/Width/Height: 480/88/250(mm)
Performance Feature	LED red scientific calculation method shows reliable performance, stable data, automatic protection over range.
Optional Function	(1) Analog output of 0-5V/0-10V/4-20mA; (2) Print the pressure value regularly; (3) AS232 (standard BPS9600)/RS485 serial port output; (4) Vacuum setting; (5) Multi-station inspection; (6) Remote control, the longest distance 250 meters to measure the system pressure value.

Tip: Pressure less than 10⁻⁸Pa can be degassed by pressing the degassing button. The chassis should be grounded. High frequency spark leak detector should not be used near the ionization vacuum gauge. If you want to use it, please remove the ionization vacuum gauge cable and use it. It is forbidden to start the machine in the atmosphere.

Matching Regulation:



← CF35ZJ12





EVDL-9 Ionization vacuum gauge

The EVDL-9 ionization vacuum gauge is zj-27 ionization gauge. Vacuum gauge has the characteristics of reliable performance, stable data, simple operation, suitable for high vacuum measurement and control.

Product Model	EVDL-9 Ionization vacuum gauge
Matching Regulation	CF35 Flanged or Straight Inserted 15.5 Glass ZJ-27 Ionization Gauge
Measuring range	6x 10 ⁻⁵ - 1 Pa
Anode to Ground Potential	225V
Cathode-to-ground potential	35V
Power Supply	AC 220V, 50Hz
Power Consumption	22W
Weight	5.7Kg
Case size	Width/height/depth : 480/132/200(mm) Width/height/depth :480/88/250(mm)
Performance Feature	LED red scientific calculation method shows reliable performance, stable data, automatic protection over range.
Optional Function	(1) Analog output of 0-5V/0-10V/4-20mA; (2) Print the pressure value regularly; (3) AS232 (standard BPS9600)/RS485 serial port output; (4) Vacuum setting; (5) Multi-station inspection; (6) Remote control, the longest distance 250 meters to measure the system pressure value.

Tip: The chassis shall be connected to the ground. High frequency spark leak detector shall not be used near the ionization vacuum gauge. If it is to be used, please remove the wire of the ionization vacuum gauge and then use it. Atmospheric power on is prohibited.

Matching Regulation :



← CF35ZJ27



EVDL-56 Composite Vacuum Gauge

EVDL-56 composite vacuum gauge adopts ZJ-10 ionization gauge and ZJ-52 resistance gauge, which is suitable for vacuum measurement and control of vacuum equipment.

Measuring range: 10⁻⁴-10Pa for high vacuum ionization; Low vacuum resistance 0.01 pa-100kpa

Please refer to EVDL5 for the ionization part of the vacuum gauge and EVDL6 for the resistance part of the vacuum gauge.



EVDL-76 Composite Vacuum Gauge

EVDL76 composite vacuum gauge adopts ZJ-12 ionization gauge and ZJ-52 resistance gauge, which is suitable for vacuum measurement and control of vacuum equipment.

Measurement range: 10⁻⁸-10⁻²pa for ultra-high vacuum ionization; Low vacuum resistance 0.01 pa-100kpa

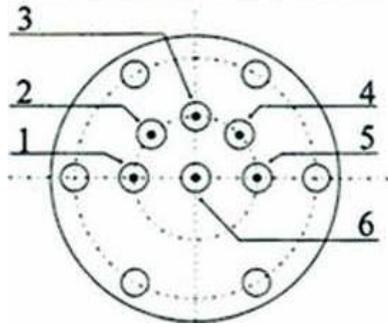


EVDL-96 Compound vacuum gauge

EVDL96 composite vacuum gauge adopts zj-27 ionization gauge and zj-52 resistance gauge, which is suitable for vacuum measurement and control of vacuum equipment.

Measuring range: 10⁻⁵-1Pa for high vacuum ionization; Low vacuum resistance 0.01 pa-100kpa Refer to evdl-9 for the ionization part of the vacuum gauge and evdl-6 for the resistance part of the vacuum gauge.

1、 Nude Gauge Installation



- EVDL-7: P1, 5 is the electron acceleration pole
P2, 3 or P3, 4 is the filament
P6 is the ion collector
- EVDL-5: P1, 5 is the electron acceleration pole
P2, 4 is the filament
P6 is the ion collector
P3 is an empty foot
- EVDL-9: same as EVDL-5

Metal bare gauge electrode pin distribution diagram

The front panel power switch should be placed in the off position.

Plug one end of the power cable into the power of the rear panel and the other end into the AC 220V. One end of the regulatory cable is plugged into the regulatory socket on the rear panel and the other end is connected to the regulation. The red line (red clip) is attached to the foot of the electron acceleration pole (1 or 5).

The other two wires (black clips) are attached to the filaments (2, 4) and correspond to the EVDL-5, EVDL-9 and EVDL-56/EVDL-96 ionization sections.

Connected to the (2, 3) or (3, 4) feet, corresponding to the EVDL-7 and EVDL-76 ionization parts

One end of the shielded wire is plugged into the collector socket on the rear panel, and the other end is connected to the collector (6). The GND of the rear panel is connected to the bare gauge housing and grounded. The regulatory cable should be fixed to the bracket to avoid short circuit between the terminals.

2、 Glass Gauge Installation



ZJ12 Diagram of glass gauge



ZJ10 Diagram of glass gauge



ZJ27 Diagram of glass gauge

ZJ-12 glass bulb regulation electrode lead diagram is as above circle, the cable red line is connected to the electron acceleration pole 1 or 5 feet, the other two are connected to the filament 2, 3 or 3, 4 feet, the shield wire is connected to the ion collection On the pole 6 pin, the other end of the cable and shield wire are plugged into the GAUGE and COLLECTOR sockets on the rear panel.

ZJ-10, ZJ-27 glass shell regulation electrode lead diagram as shown above, plug one end of the cable into the regulation tube, with clip wire clamped on the collector, the other end is plugged into the instrument panel GAUGE (regulation) and At the location of the COLLECTOR, ground the

Common malfunctions :

1. After the ionization meter is turned on, the digital part of the digital tube is not displayed, and the index part shows 0. This means that the system vacuum is not enough, and the system enters the measurement range and then turns on. If the system proves that the system has entered the measurement range, the problem remains. Please contact the sales unit. If the instrument is faulty, it should be returned to the factory for repair.
2. After the ionization meter is turned on, the numerical part of the digital tube displays the zero point, and the index part shows 4, 5 or 8 (corresponding to the EVDL-5, EVDL-9 and EVDL-7 vacuum gauges respectively), which means two cases, one case The regulation filament is broken. The inspection method is as follows. If the regulation is glass, you can see that the filament is not bright with your eyes. At this time, you should replace it with a new one. If it is a metal gauge, remove the two clips of the filament and measure with the multimeter's on-off file. If the multimeter beeps, the filament is not broken, otherwise the filament is broken. The metal gauge can be repaired, please contact the sales unit. In another case, the cable and the ion collector are not connected or have a place to be soldered. If it is not the above two situations, please contact the sales unit. If the instrument is faulty, it should be returned to the factory for repair.

Common Vacuum Unit Conversion:

	1atm 标准大气压	1bar 巴	1 mbar 毫巴	1Pa 帕	1Torr 托	1mmHg 毫 米汞柱
1atm 标准大气压	1	1.01325	1013.25	101325	760	760
1bar 巴	0.9869	1	0.001	100000	750.062	750.062
1mbar 毫巴	0.00098	0.001	1	100	0.75	0.75
1 Pa 帕	0.00001	0.00001	0.01	1	0.0075	0.0075
1Torr 托	0.00132	0.00133	1.33	133.3	1	1
1mmHg 毫 米汞柱	0.00132	0.00133	1.33	133.3	1	1