## **Electronic Vacuum Regulator**













The electronic vacuum regulator is a closed loop design, consisting of 2 solenoid valves, one pressure transducer and an electronic board that performs PID closed loop control. According to the input electronic signal, one valve opens up the vacuum inlet, and the other valve acts as vacuum breaker. Whilst increasing the vacuum level, the inlet valve acts upon the internal piston and allows air to be withdrawn. The internal pressure transducer senses the vacuum level and provides feedback to the electronic board which in turn controls the action of two valves until the target vacuum level is reached.

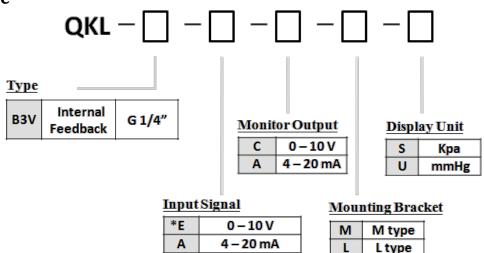
KaoLu's vacuum pressure regulator receives input signal of 0-10V, 4-20mA or RS485-modbus.

#### **Specifications**

QKL-B3V		
0~ -101 kpa	Repeatability	±0.3% F.S.
0-10V / 4-20mA	Hysteresis	±0.25% F.S.
0-10V / 4-20mA	Linearity	±0.3% F.S.
DC24V (≦4W)	Accuracy	±0.3% F.S.
0.8S	Medium	Vacuum
0-70°C ( 32-158 °F)	Flow Rate(L/min)	250(close to 0 kPa)~ 600(close to -101 kPa)
G1/4"	Electrical Connection	M12 Connector (2m)
Over 1 Billion Times	Ingress Protection	IP65
550 g	Manifold Material	Aluminum
	$0-10V / 4-20mA$ $0-10V / 4-20mA$ $0-10V / 4-20mA$ $0C24V (\leq 4W)$ $0.8S$ $0-70^{\circ}C (32-158 {\circ}F)$ $G1/4$ " Over 1 Billion Times	$0\sim -101 \text{ kpa}$ Repeatability $0-10\text{V} / 4-20\text{mA}$ Hysteresis $0-10\text{V} / 4-20\text{mA}$ Linearity $0.8\text{S}$ Medium $0-70^{\circ}\text{C} (32-158^{\circ}\text{F})$ Flow Rate(L/min) $0.8\text{S}$ Flow Rate(L/min) $0.8\text{S}$ Ingress Protection

<sup>\*</sup>A positive pressure of at least 0.3 bar must be applied to the P port to achieve 0 Kpa. Without it the operating pressure range is -26kPa to -101 Kpa.

### **Ordering Code**

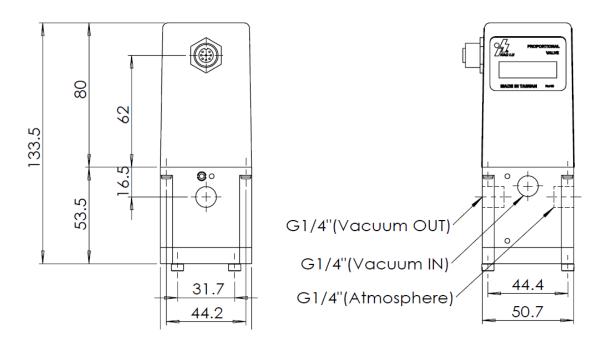


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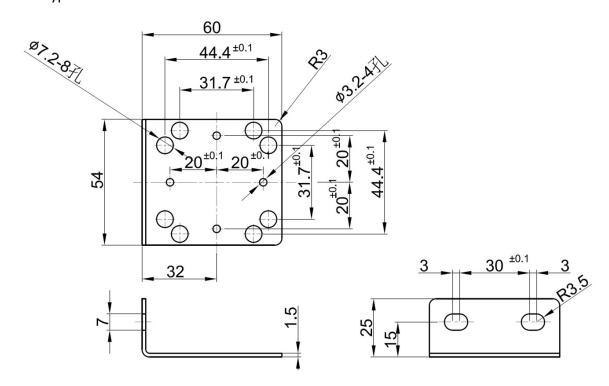
QKL-B3V



#### **Overall Dimension**



#### Bracket L Type

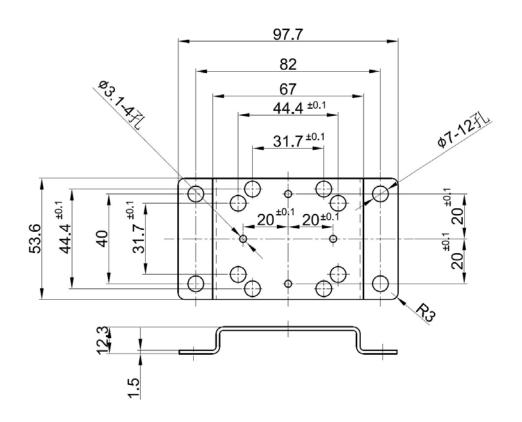


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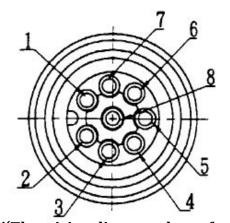
QKL-B3V



Bracket M Type



### **Wiring Description**



**XThe wiring diagram shows from top view.** 

No.	Color	Function
		24V DC Power (-)
1	Blue	Command (-)
		Output monitor (-)
2	Brown	24V DC Power (+)
3	Black	Monitor output (+)
		0-5 V Command (+)
4	White	0-10 V Command (+)
		4-20 mA Command (+)



Warning: Do not rotate the connection socket when connected,

to avoid damage to the internal sensor.

