

Small vacuum generator

VB/VBP series

Parameter specification

■ Vacuum generator specification

Use fluids		Air, vacuum
Operating pressure range		0.3~0.7MPa
Use vacuum pressure		-100~0kPa
Operating temperature range		5~50℃
Operating humidity range		35~85%RH
Vibration/impact resistance		50m/s ² or less / 150m/s ² or less
Protective structure		IP40 quite
Oil		no
Stress resistance	Gas supply circuit	0.8MPa
	Vacuum circuit	0.2MPa

※) Pressure resistance simply said "product not damaged pressure", is the stress of a product can be used normally.

■ Solenoid valve specification for vacuum supply

Action way		Direct action
Valve function		Normally closed
Response time	OFF⇒ON	4.5ms
	ON⇒OFF	4.5ms

※) Response time is 0.5 MPa rated voltage supply (100%) of the value.

■ Vacuum breaker with solenoid valve specifications

Action way		Direct action
Valve function		Normally closed
Response time	OFF⇒ON	4.5ms
	ON⇒OFF	4.5ms

※) Response time is 0.5 MPa rated voltage supply (100%) of the value.

■ Solenoid valve specification

Solenoid valve	Supply of vacuum valve, vacuum valve
Operation mode	Direct operation
Valve structure	Direct-acting type
Rated voltage	DC24V ± 10%
Limiting circuit	Surge absorber
Promise time	4ms
Power consumption	1W
Manual operation	Button structure
Operation instructions	When the coil current, the red light is lit up
Wiring method	Red: DC24V; Black: COM

■ Specifications of vacuum pump units

Use fluids		Air, vacuum
Operating pressure range		0~0.7MPa
Use vacuum pressure		-100~0kPa
Vacuum valve size		0.7/0.9mm (Customized)
Use temperature and humidity ranges		5~50°C/35~85%RH
Vibration/impact resistance		50m/s ² or less / 150m/s ² or less
Protective structure		IP40 quite
Oil		no
Stress resistance	Gas supply circuit	0.8MPa
	Vacuum circuit	0.2MPa

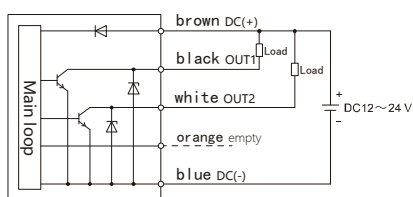
※) Pressure resistance simply said "product not damaged pressure", is the stress of a product can be used normally.

■ Specifications of vacuum pressure switch

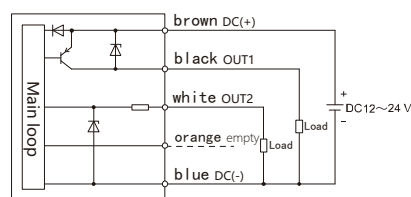
Pressure type		Compound pressure
Output type		NPN、PNP
Rated pressure range		-100~100kPa
Display and set pressure range		-101.2~110kPa
Maximum withstand voltage		Not exceeding twice the rated pressure
Supply voltage		DC12~24V ±10%
Drain current		Below 50mA
Motion accuracy		±3%Fs. Below (at Ta=25°C)
Switch output	Control output	Load voltage: below DC30V
		Load current: Below 100mA
	Lag value	Residual voltage: Below 1V
	Repetitive error	Minimum display unit
	Response time	±0.2%F.S
	Short circuit protection	2.5ms, 5ms, 100ms, 500ms optional
Analog output		Built-in
		Output voltage C1:5V±2%
		Resolution: 1/200
		Linearity ±2% F.S or less
		Output impedance: 1kΩ
		10:37 segment LED display

※) The allowable variation of "zero voltage", "span voltage" and "switch output setpoint" with repeated application of pressure is ±3%F.S.

Output wiring diagram



NPN Output type



PNP Output type

brown: DC(+)

 black: OUT1

 white: OUT2

 orange: empty

 blue: ov