

VSL series Integrated Type Vacuum Ejector

Precautions for using this product:

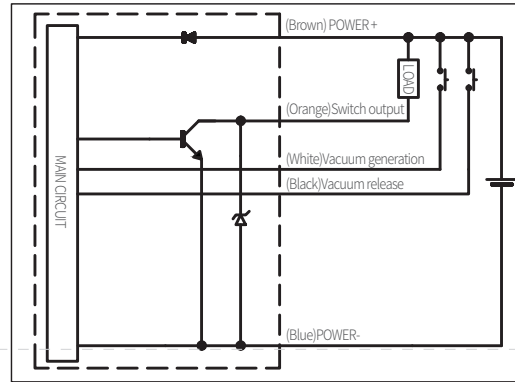
1. DO NOT use it in corrosive and flammable gas or any liquid.
2. Use it in the given voltage range set in the specification table. Otherwise, the product may get damaged and result in malfunction.
3. Keep this product from impact or falling from high above when installing it. Otherwise, the product may get damaged and result in malfunction.
4. Power off before connecting this product to any circuit control system. Otherwise, any invalid wiring or short circuit may cause this product damage.
5. DO NOT use this product in a wet environment or with oil mist.
6. This series of products comes without explosion resistance verification. DO NOT use it in environment with explosive gas or dust.
7. DO NOT bundle wires of this product with power cords or other high-voltage cables or it may underperform due to interference by noise.

A. Specification

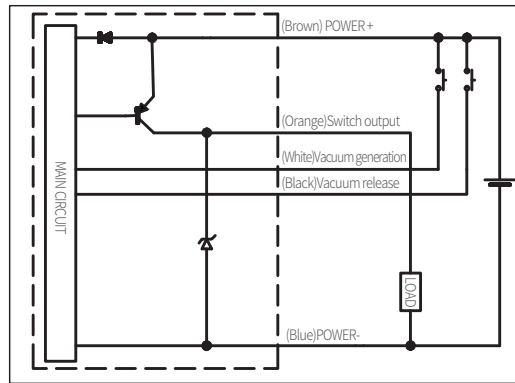
Model		VSL
Rated pressure range		-100.0~100.0kPa
Set pressure range		-90.0~0kPa
Pressure resistant		500kPa
Applicable gas		Air, non-corrosive, inflammable
Pressure unit Set minimum scale	kPa	0.1
	kgf/cm ²	0.01
	bar	0.01
	psi	0.1
	inHg	0.1
	mmHg	1
Voltage		12 or 24V DC±10%, ripple peak (P-P) 10% or less
Consumption current		≤40mA (null load)
Switch Output	Output mode	NPN or PNP open collector output
	Maximum load current	80mA
	Voltage of input power	24VDC
	Internal voltage	≤1.5V
Linear analog output	Reaction time	≤2.5ms (Featuring malfunction proof: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms optional)
	Output short circuit protection	None
	Linearity	±1% F.S.
Display	Display	4-digit, 7-step display (green)
	Update time	About 0.2 seconds
Repeat accuracy	Display accuracy	±2% F.S.±1 digit (with ambient temperature: 25±3°C)
	Repeat accuracy	±0.2% F.S.±1 digit
Withstand voltage	Working environment temperature	0~50°C
	Storage environment temperature	-10~50°C (without condensing and icing)
	Ambient humidity	Act and storage: 35~85% RH (without condensing)
Temperature characteristics		±2% F.S. Comparison reference temperature 25°C (within 0~50°C temperature range)
Wire specifications		Oil resistant PVC wire (0.14mm ²)
Weight		About 33g (including one piece of wire 1 meter long)

B. Output circuit wiring diagram

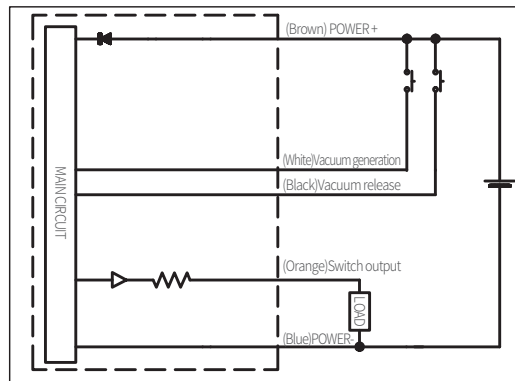
NPN type output circuit



PNP type output circuit



ANALOG

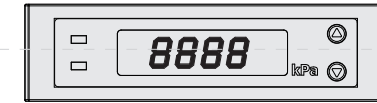


C. Ordering information

VSL - A07 - DC24 - P04

- P04: NPN output
- P05: PNP output
- P06: ANALOG 1~5V

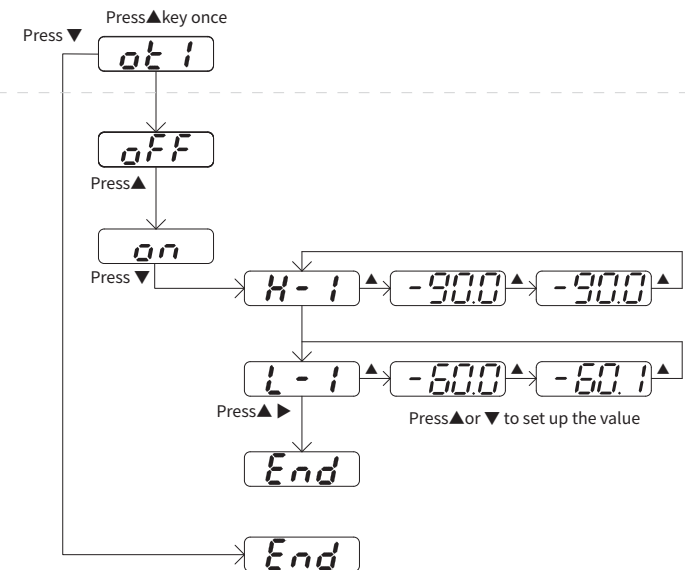
D. Dimension



Brown:	DC24V
White:	Vacuum
Black:	Release
Orange:	OUT/ ANALOG 1~5V
Blue:	GND

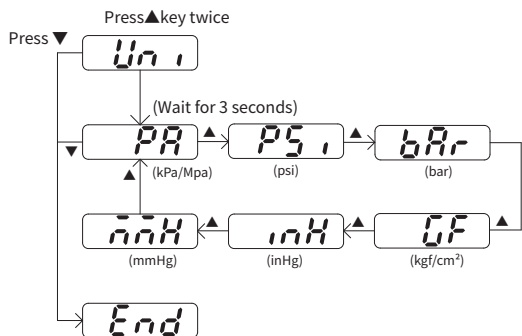
E. Initial setting mode

1. OUT1 type setup

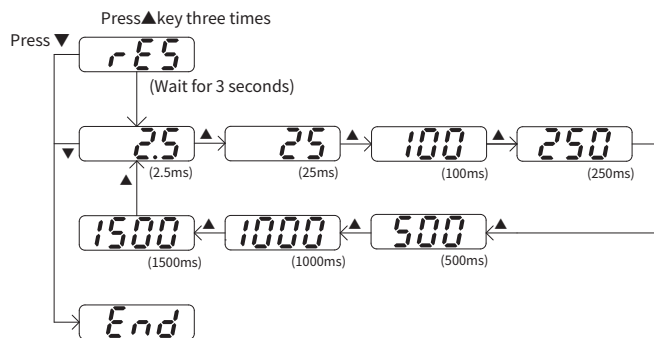


E. Initial setting mode

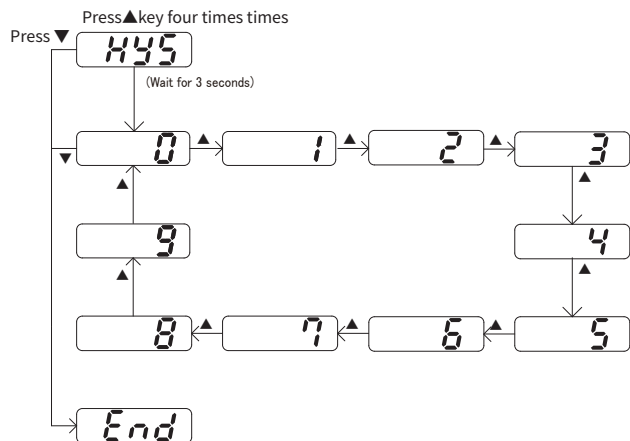
2. OUT2 type setup



3. Unit setup

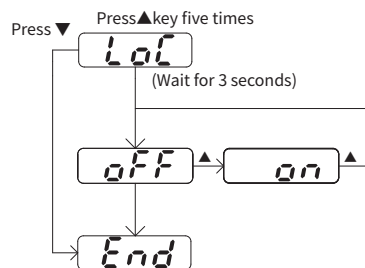


4. Response time setup



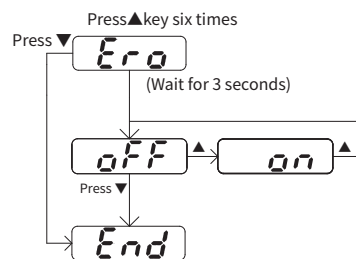
5 Key lock mode

This mode is aimed to prevent invalid key pressing.



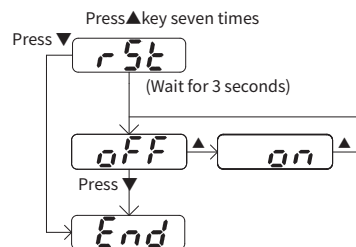
* Press and hold ► key
Until **UnL** displays to unlock it.

6.Reset setup



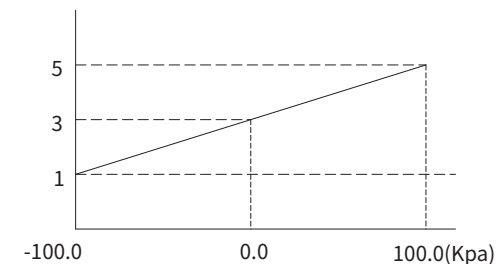
* Set scope of reset at or less than 3% F.S.

7.Reset to factory default



F. Linear analog output description

(Compound)
Analog output (V)



G. Pressure unit conversion table

From \ TO	Pa	kPa	MPa	kgf/cm ²	psi	bar	inHg
1Pa	1	0.001	0.000001	0.000010197	0.000145038	0.00001	0.0002953
1kPa	1000.000	1	0.001000	0.010197	0.145038	0.01000	0.2953
1MPa	1000000	1000	1	10.197	145.038	10	295.2998
1kgf/cm ²	98066.5	98.0665	0.0980665	1	14.2233	0.980665	28.95979
1psi	6895	6.895	0.006895	0.07031	1	0.06895	2.036074
1bar	100000.0	100.0000	0.100000	1.01972	14.5038	1	29.52998
1inHg	3386.388	3.386388	0.003386	0.034530	0.491141	0.033863	1