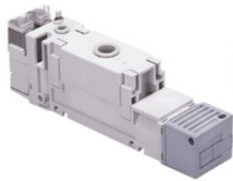


EZL1 Multistage Series Vacuum Generator



EZL1

Multistage Vacuum Generator



With Valve



Blank Valve



Vacuum Pressure Switch Specifications



With Vacuum pressure Detection Port



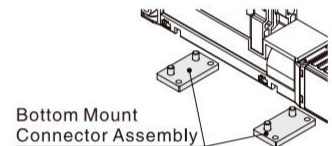
Exhaust Port Specifications

How to Order?

Blank Valve

Series NO	Exhaust Type	Vacuum Pressure Detection part	Output Type
EZL112A: Multistage Vacuum Generator	No Mark: Muffler exhaust P: Rc1/2 Exhaust port PF: G1/2 Exhaust port PN: 1/2—14NPT Exhaust port Note: Rc1/2 Exhaust port, 1/2—14NPT Exhaust port, are all customized product	Blank: Blank GN: Vacuum pressure detection port: (G1/8) G: Pressure Gauge D: Vacuum Pressure switch	N: NPN Open collector, 1 Output P: PNP Open collector, 1 Output A: NPN Open collector, 2 Output B: PNP Open collector, 2 Output Blank: Blank B: Bottom mount connector assembly (ZL112A-AD1-A) Note: For compatibility with the 27 mm spacing of chassis screws in the previous EZL212 model. Essential for replacing the bottom-mounted EZL212 (2 pieces/set, with 4 screws). Side mounting holes are interchangeable Blank additional options.


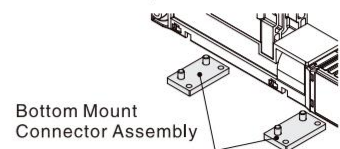
Order Example: ETZL112A Multistage Vacuum Generator, G1/2 Exhaust Port type, vacuum pressure switch NPN open collector : 1 Output Bottom mount connector assembly (ZL112A-AD1-A), ERP code is: EZL112APF-DN-B



With Valve

Series NO	Exhaust Type	Supply Valve, Release Valve Combination	Rated Voltage	Wiring	Vacuum Pressure Detection Part	Output Type
EZL112A: Multistage Vacuum Generator	No Mark: Muffler exhaust P: Rc1/2 Exhaust port PF: G1/2 Exhaust port PN: 1/2—14NPT Exhaust port Note: Rc1/2 Exhaust port, 1/2—14NPT Exhaust port, are all customized product	K1: Supply Valve (N.C.) Release Valve (N.C.) K2: Supply Valve (N.C.)	5: DC24V 6: DC12V	Z: Solenoid valve with LED indicator and overload protection	Blank: Blank GN: Vacuum pressure detection port (G1/8) G: Pressure gauge D: Vacuum pressure switch	N: NPN Open collector, 1 Output P: PNP Open collector, 1 Output A: NPN Open collector, 2 Output B: PNP Open collector, 2 Output Blank: Blank B: Bottom mount connector assembly (ZL112A-AD1-A) Note: For compatibility with the 27 mm spacing of chassis screws in the previous EZL212 model. Essential for replacing the bottom-mounted EZL212 (2 pieces/set, with 4 screws). Side mounting holes are interchangeable Blank additional options.

Code	Description
L	Plug Type with Wire: (Length 300mm)

Order Example: ETZL112A Multistage Vacuum Generator, G1/2 Exhaust Port type, Supply Valve (N.C.), Release Valve (N.C.), Rated Voltage DC24V vacuum pressure switch, NPN open collector : 1 Output Bottom mount connector assembly (ZL112A-AD1-A) ERP code is: EZL112APF-K15Z-DN-B

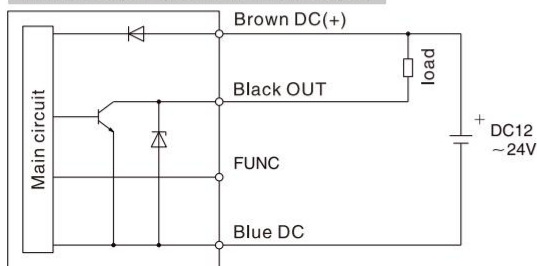
EZL1 Multistage Series Vacuum Generator

Product Specifications

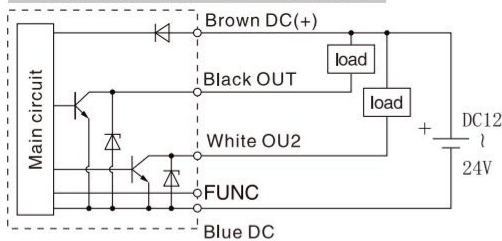
Model	EZL112A
Orifice(mm)	1.2
Supply pressure (MPa)	0.45
Vacuum pressure (kPa)	-84
Suction flow (L/min(ANR))	100
Air consumption (L/min(ANR))	57
Supply pressure range(MPa)	0.2-0.5
Working temperature (°C)	5-50(No condensation)
Use fluid	clean air
Vibration resistance [m/s ²]	No pressure switch 30 With pressure switch 20
Shock resistance [m/s ²]	No pressure switch 150 With pressure switch 100
Exhaust noise [dB(A)]	65

Internal Circuit and Wiring Example of Vacuum Pressure Switch

NPN for output specification N (1 output)

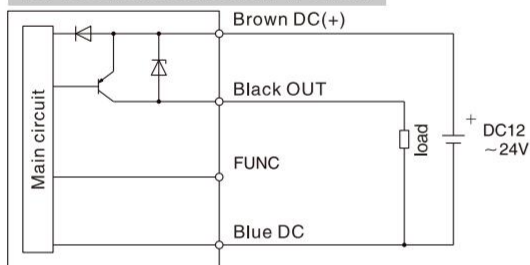


NPN for output specification A (2 output)

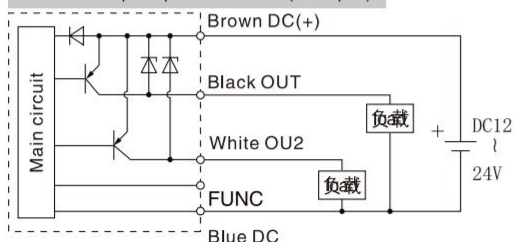


Max.28V, 80mA Residual voltage below 2V

PNP for output specification P (1 output)



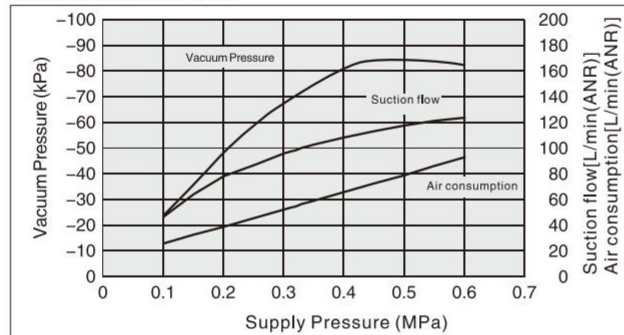
PNP for output specification B (2 output)



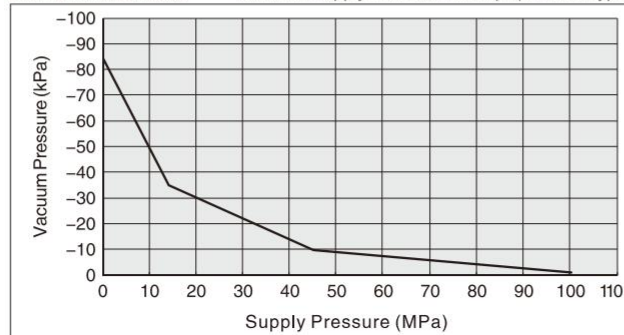
Max.28mA, 80mA Residual voltage below 2V

Exhaust characteristics, flow characteristics, time to vacuum (time value)

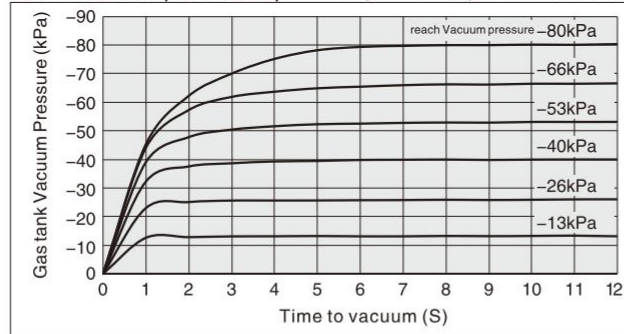
Exhaust Characteristics



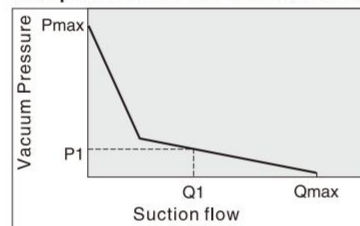
Flow Characteristics Standard Supply Pressure 0.35Mpa (no valve type)



Time to Vacuum (Time Value) Measuring conditions, gas tank volume is 1L



Interpretation of Flow Characteristics



The flow characteristics reflect the relationship between the vacuum degree of the vacuum generator and the suction flow rate. When the suction flow rate changes, the vacuum degree will also change. Generally speaking, it reflects the relationship of the vacuum generator under the standard operating pressure. In the left figure, Pmax represents the maximum vacuum pressure, and Qmax represents the

maximum suction flow. The value used as a specification in samples etc. is this value. Changes in vacuum pressure are described on the right.

- 1: After blocking and sealing the suction port of the vacuum generator, the suction flow rate becomes 0 and the vacuum pressure becomes the highest Pmax
- 2: When the suction port is opened and air flows (air leakage), the suction flow rate increases and the vacuum pressure becomes lower. (P1 and Q1)
- 3: After further opening the suction port and fully opening it, the suction flow rate becomes the maximum (Qmax), and the vacuum pressure is almost 0 atmosphere. Similar to situations where the adsorption air permeability is high or the leakage is the highest, the vacuum pressure will hardly become high. It should be noted that

Interpretation of time to reach vacuum

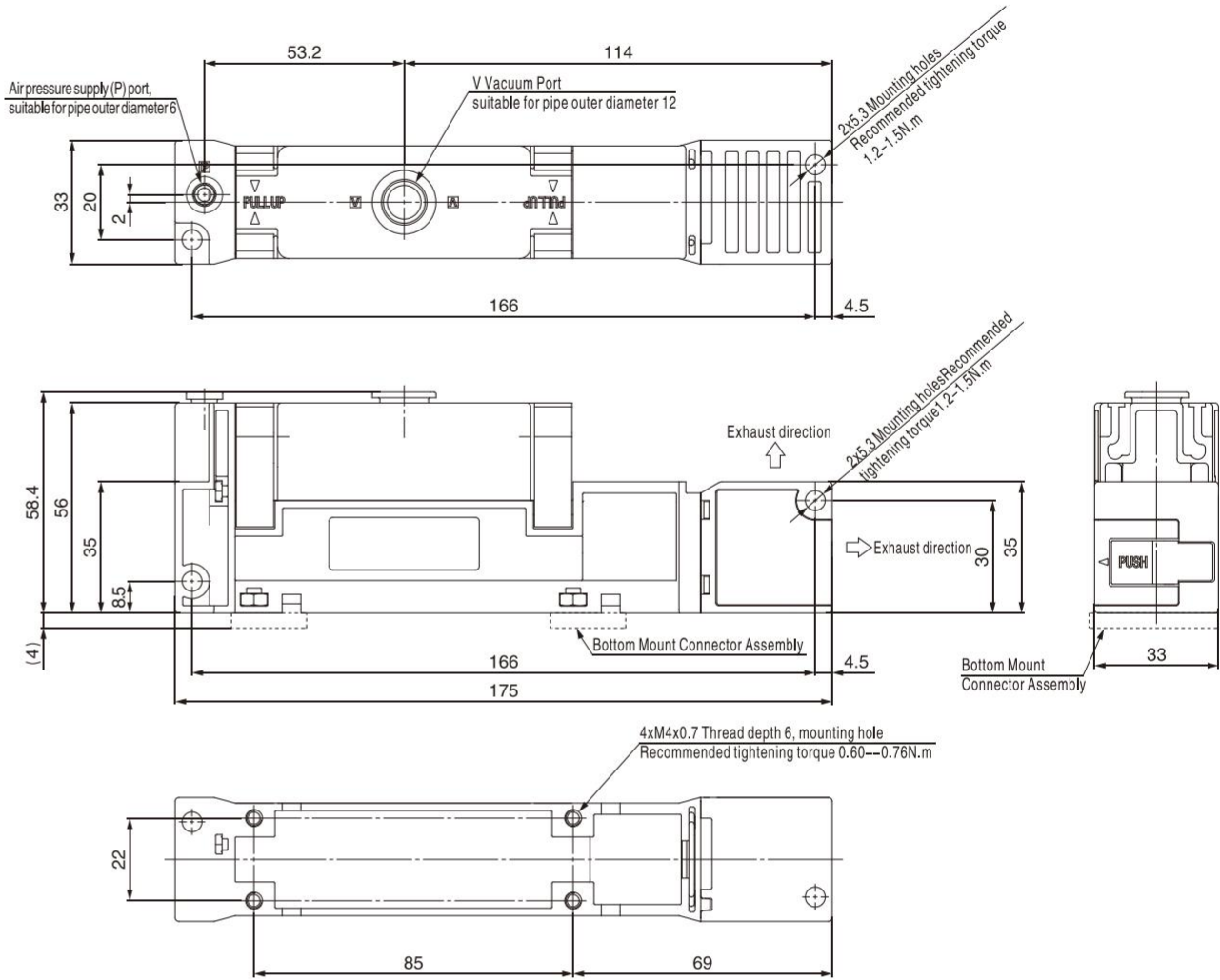
This reflects the time it takes for the gas tank of the sealed container 1L to reach vacuum pressure determined by the adsorption conditions such as the workpiece from atmospheric pressure. In the case of EZL1, it takes about 7.0 seconds to reach the vacuum pressure -80kPa.

EZL1 Multistage Series Vacuum Generator

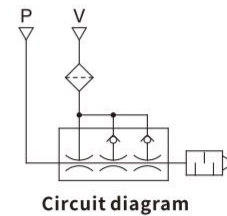
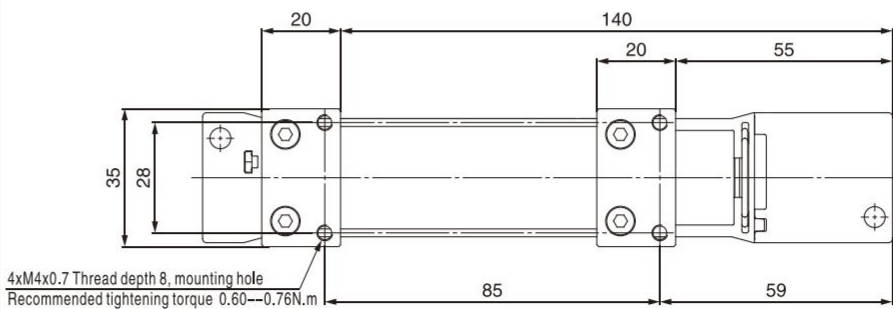


Dimensional Drawing

EZL112A(-B) Valve (Blank supply valve and release valve)



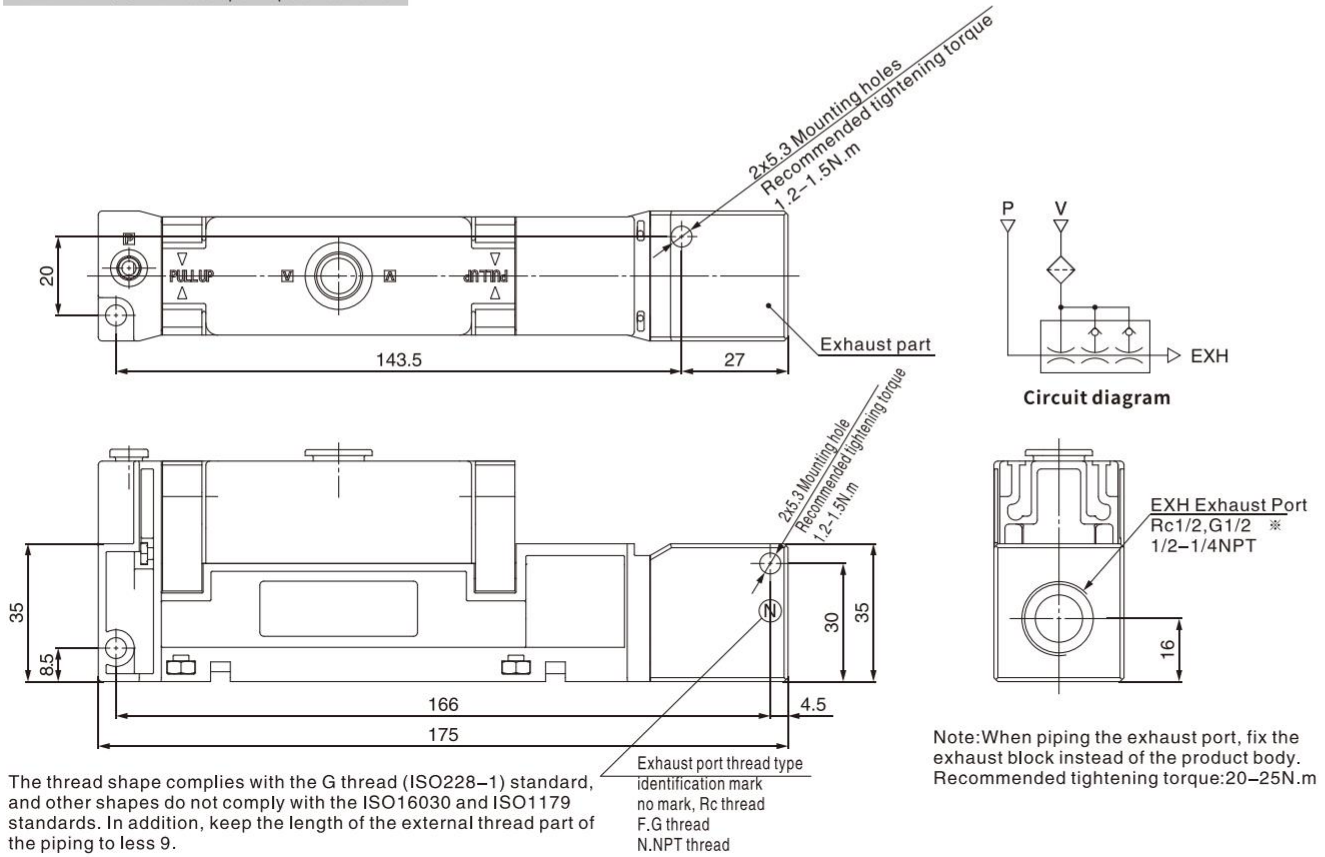
EZL112A-B with bottom mounted connector components



When installing the main body, please use the above recommended tightening torque. If excessive torque is used, the product may be damaged.

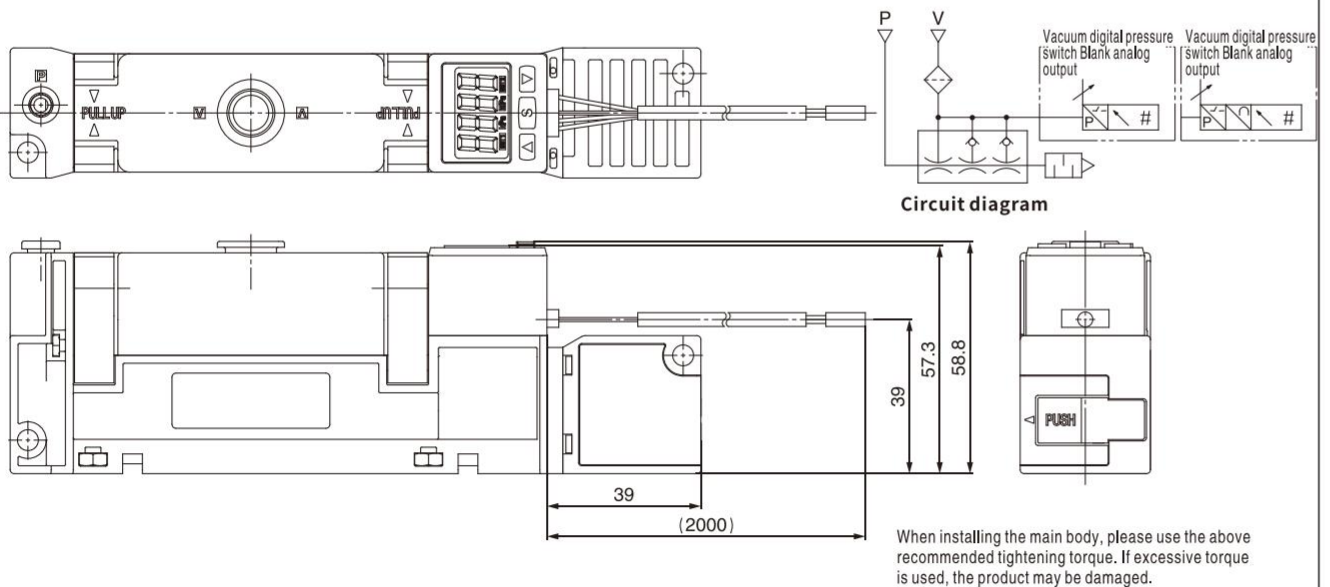
Dimensional Drawing

EZL112AP □ Exhaust port specifications



The thread shape complies with the G thread (ISO228-1) standard, and other shapes do not comply with the ISO16030 and ISO1179 standards. In addition, keep the length of the external thread part of the piping to less 9.

EZL112A-D □ □ □ With vacuum pressure switch specifications

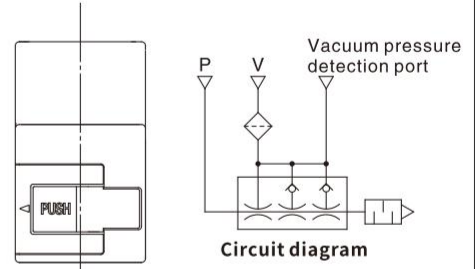
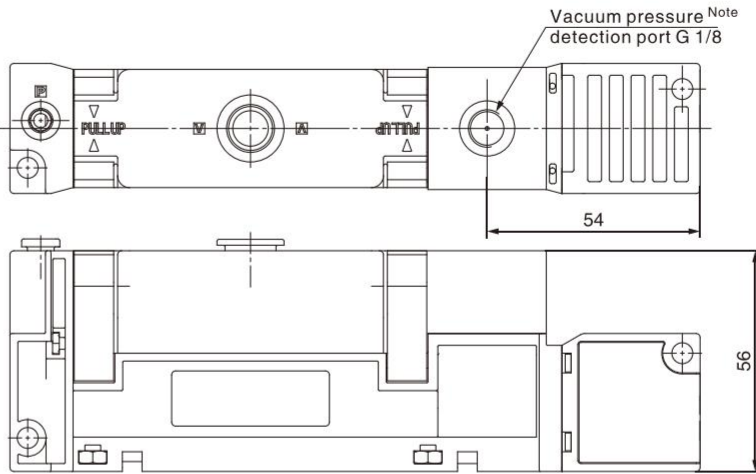


EZL1 Multistage Series Vacuum Generator



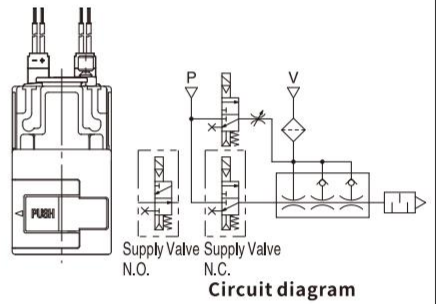
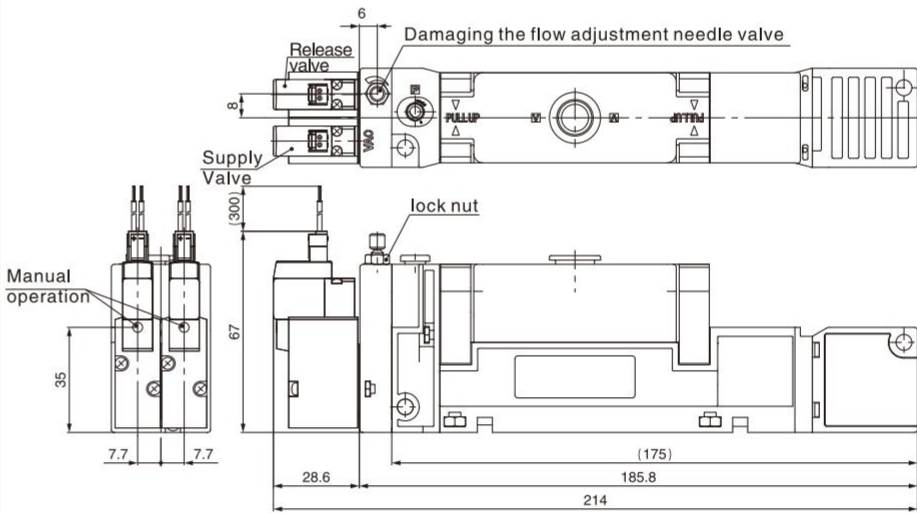
Dimensional Drawing

EZL112A-GN Specifications with vacuum pressure detection port

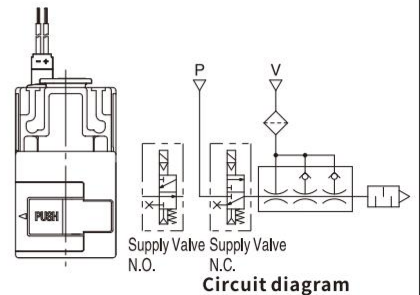
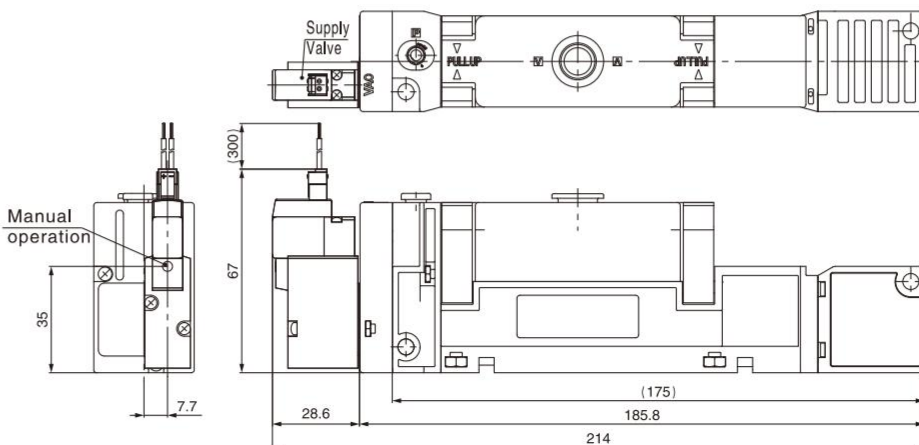


Note: When installing a pipe fitting, etc., on the vacuum pressure detection port, fix the clamping surfaces at a distance of 18 inches before proceeding.
(Recommended tightening torque: 3-5N.m)

EZL112A-K1 Valve (With supply valve and release valve)



EZL112A-K2 Valve (With supply valve)



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EZL1