EZL3/EZL6

Multistage Vacuum Generator


EZL3


EZL□□06


Vacuum Pressure Switch Specifications


Supply Valve and Release Valve


EZL6

Blank Valve


EZL□□04

Connecting pipe specifications


Vacuum pressure gauge specifications


With vacuum pressure detection port


Exhaust Port Specifications

How to Order?

Blank Valve

Series NO	Maximum Suction Flow	Standard Supply Pressure	Vacuum (2/V) Port Size/Applicable Tube Outer Diameter of Supply (1/P) Port	Exhaust specifications	_	Vacuum Pressure Detection Part	Output Specifications	_	□

EZL: Multistage Vacuum Generator

3：300L/min(ANR)
6：600L/min(ANR)
Note:When connecting pipes and exhausting ports

M：0.35MPa
H：0.50MPa

Mark	2/V Vacuum Port	(1/P)supply port
06	Rc3/4	8(Metric system)
04	2XRc1/2(Branch pipe specifications)	
~~F06~~	G3/4①	
~~F04~~	2XG1/2①(Branch pipe specifications)	
~~N06~~	NPT3/4	5/16" Imperial
~~N04~~	2XNPT1/2(Branch pipe specifications)	

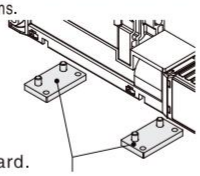
No Mark: Muffler exhaust
P:Rc1 Exhaust port
PF:G1 Exhaust port
PN: NPT 1

Blank:Blank
GN:Vacuum pressure detection port:(G)(Rc 1/8,G 1/8,NPT1/8)
G:Mechanical 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.


Bottom Mount Connector Assembly

Order Example:

EZL multi-stage vacuum generator, maximum suction flow 300L/min (ANR), standard supply pressure 0.35MPa, Vacuum (2/V) port Rc3/4, supply (1/P) port Rc3/4, exhaust port Rc1， vacuum pressure switch, NPN open collector, 1 output, bottom mounting connector assembly (ZL112A-AD1-A)。ERP code is:EZL3H06P-DN-B

Note1: The shape of the screw match with the G thread (ISO228-1) standard, and the other shapes do not reach the ISO standard.

With Valve

Series NO	Maximum Suction Flow	Standard Supply Pressure	Vacuum (2/V) Port Size/Applicable Tube Outer Diameter Of Supply (1/P) Port	Exhaust Specifications	_	Supply valve, release valve combination	Rated Voltage	Wire Lead-Out Mthod	Indicator Light and Overvoltage Protection Circuit	_	Vacuum Pressure Detection Part	Output Specifications	_	□

EZL: Multistage Vacuum Generator

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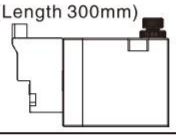
04	2XRc1/2(Branch pipe specifications)	
~~F06~~	G3/4①	
~~F04~~	2XG1/2①(Branch pipe specifications)	
~~N06~~	NPT3/4	5/16" Imperial
~~N04~~	2xNPT1/2(Branch pipe specifications)	

No Mark: Muffler exhaust
P:Rc1 Exhaust port
PF:G1 Exhaust port
PN: NPT 1

K1:Supply Valve(N.C.),Release Valve(N.C.) ②
K2:Supply Valve(N.C.)
B1:Supply Valve(N.O.),Release Valve(N.C.)
B2:Supply Valve(N.O.)

5:DC24V

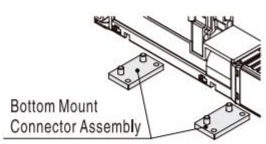
Code	M type Plug
L	L:with Wire (Length 300mm)



Z:Non-locking push type with indicator light and overvoltage protection circuit

Blank:Blank
GN:Vacuum pressure detection port:(G)(Rc 1/8,G 1/8,NPT1/8)
G:Mechanical 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


Bottom Mount Connector Assembly

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: EZL multi-stage vacuum generator, maximum suction flow 300L/min (ANR), standard supply pressure 0.35MPa, vacuum (2/V) port Rc3/4, supply (1/P) port Rc3/4, port Exhaust Rc1. Supply valve (N.C), release valve (N.C.), rated voltage 5, wire lead-out method M-type socket type, with indicator light and overvoltage protection circuit non-locking push type, vacuum pressure switch, NPN open collector , 1 output, bottom mount connector assembly (ZL112A-AD1-A). ERP code is: EZL3H06P-K15DC24VLZ-DN-B

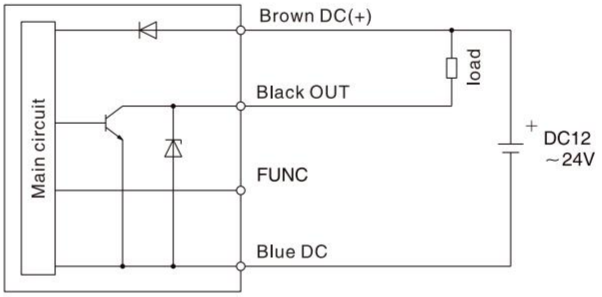
Note: 1. Screw shape match with G thread, other shapes do not match with ISO16030 and ISO1179 standards.
2. When selecting a pressure sensor with energy-saving function, only "K1" is available

Specifications

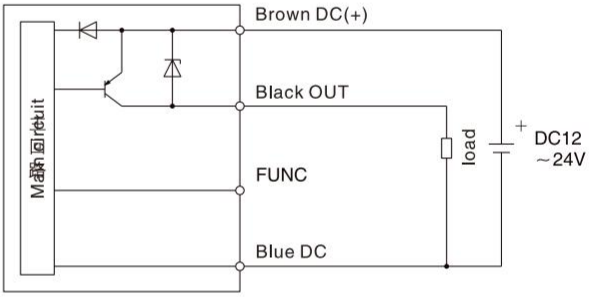
Model		EZL3M□□	EZL3H□□	EZL6M□□	EZL6H□□
Nozzle diameter [mm]		1.9	1.5	1.9X2	1.5X2
Supply Pressure [MPa]	Blank Valve	0.35	0.50	0.35	0.50
	with Valve			0.37	0.52
Vacuum Pressure [kPa]		−91	−93	−91	−93
Suction flow [Lmin(ANR)]		280		580	
Connection/vent exhaust specifications		300		600	
Air consumption [Lmin(ANR)]		150	135	300	270
Supply pressure range [MPa]		0.2~0.6			
Operating temperature range [℃]		5~50			
Use fluid		clean air			
Vibration resistant [m/s^2]		20			
Impact resistance[m/s^2]		100			
Exhaust noise [dB(A)]		68			

Internal Circuit and Wring Example of Vacuum Pressure Switch

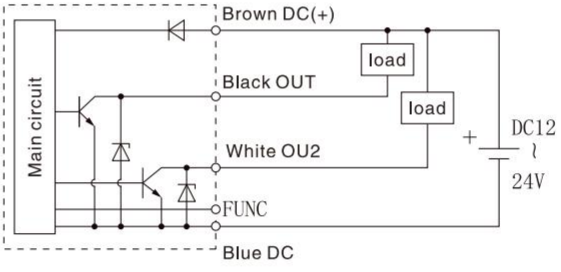
For output specification N NPN (1 output)



For output specification P PNP (1 output)

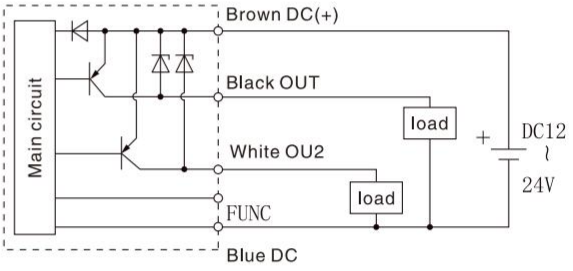


For output specification A NPN (2 output)



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

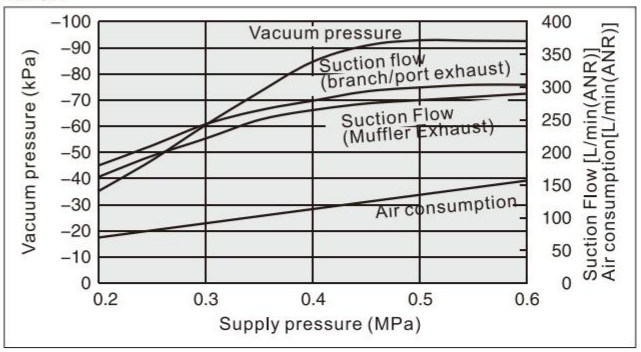
For output specification B PNP (2 output)



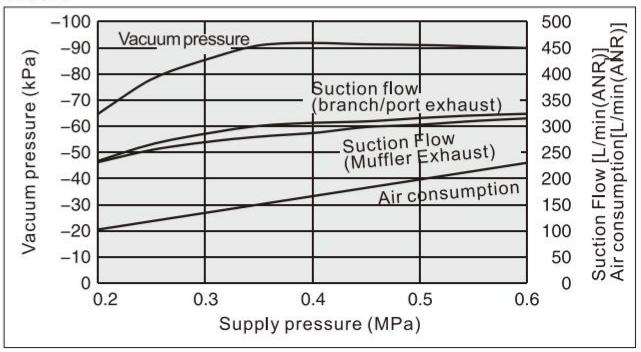
Max.28mA， 80mA Residual voltage below 2V

Exhaust Characteristics (Reference Value)

EZL3H

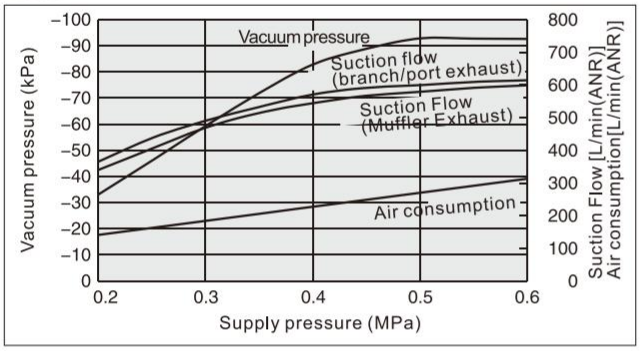


EZL3M

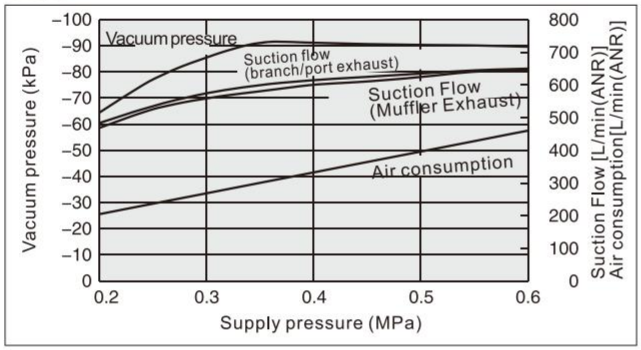


Exhaust Characteristics (Reference Value)

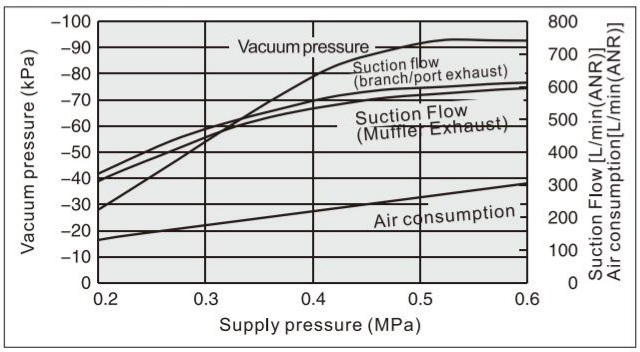
EZL6H



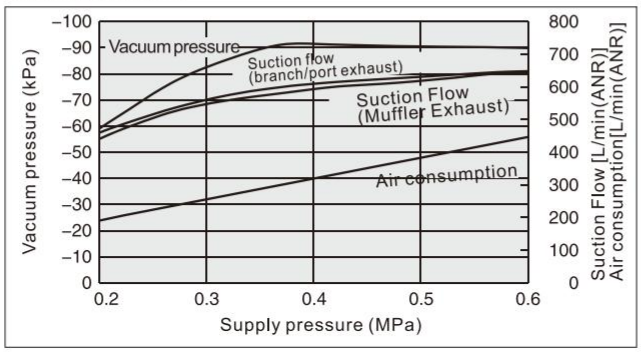
EZL6M



EZL6H(with valve)

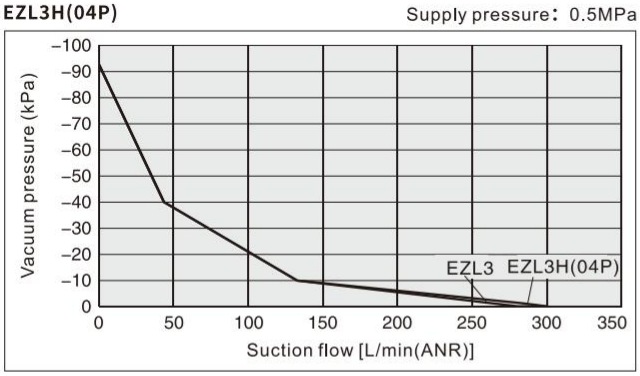


EZL6M(with valve)

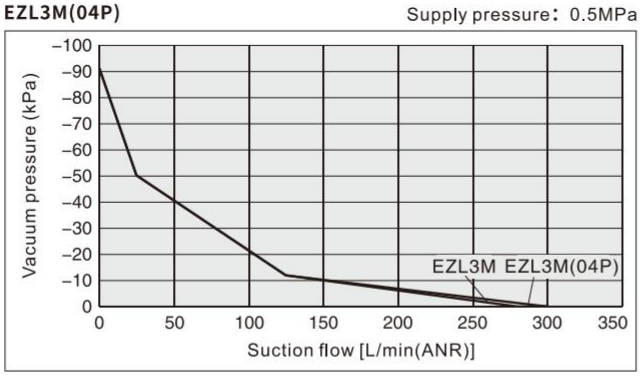


Flow characteristics (reference value)

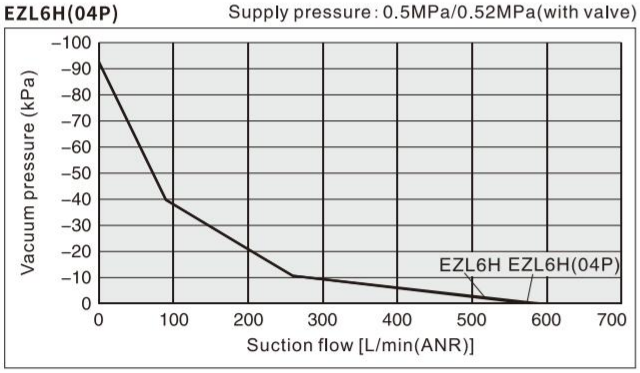
EZL3H(04P) Supply pressure: 0.5MPa



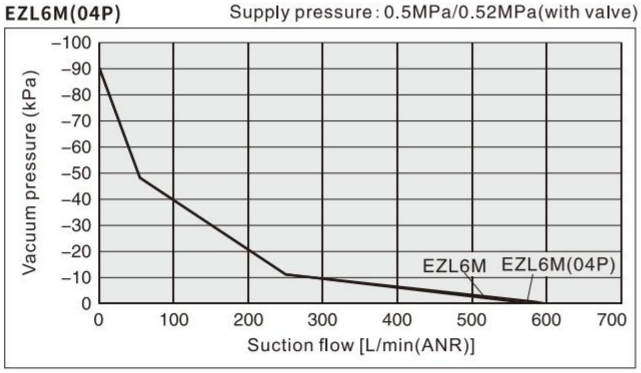
EZL3M(04P) Supply pressure: 0.5MPa



EZL6H(04P) Supply pressure: 0.5MPa/0.52MPa(with valve)

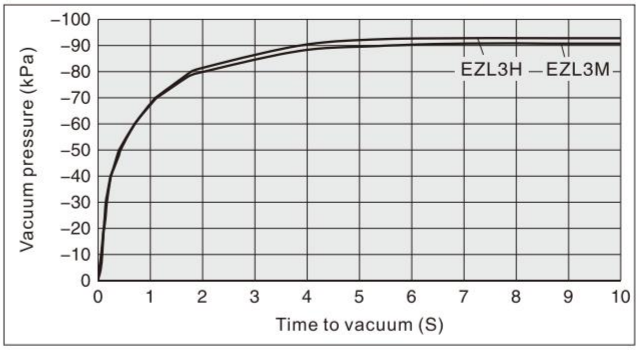


EZL6M(04P) Supply pressure: 0.5MPa/0.52MPa(with valve)

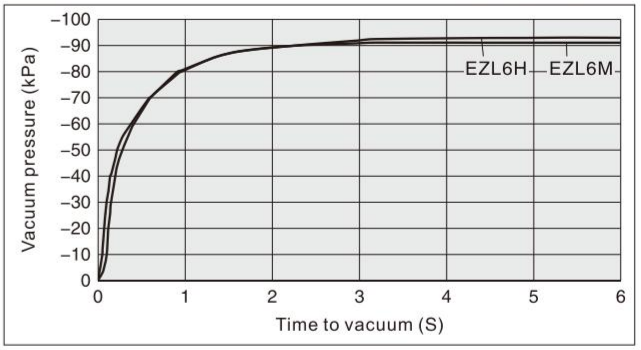


Flow Characteristics (Reference Value)

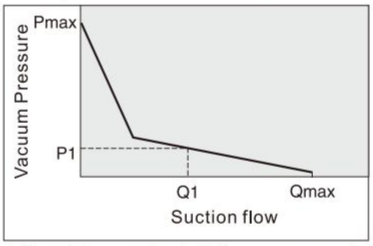
EZL3□ Gas tank volume:1L



EZL6□ Gas tank volume:1L



Interpretation of traffic 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 vacuum generator under standard operating pressure.

In the picture on the left, 9max represents the most rapid salt flow. The value used as a specification in a sample, etc. is this value. Changes in vacuum pressure are described on the right.

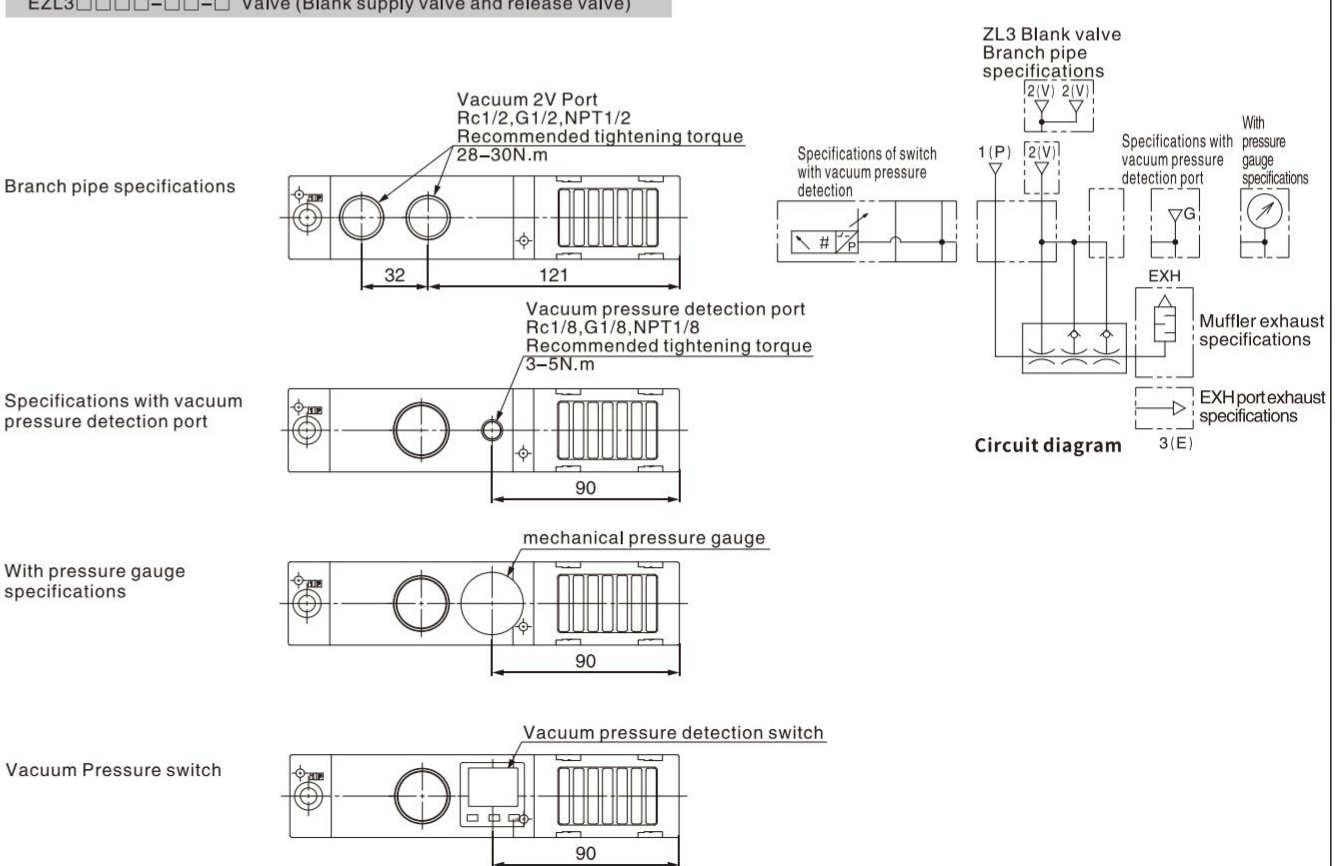
1:Blockage. After sealing the suction port of the vacuum generator, the suction flow rate becomes 0 and the vacuum pressure becomes the maximum (Pmax).
2:When the suction port is opened and air flows (air leakage), the suction flow rate increases and the vacuum pressure becomes lower. (Status of P1 and Q1)After opening the suction inlet fully, the suction flow rate becomes maximum (Qmax) and the vacuum pressure is almost 0
3: Gas–like adsorption When the air permeability is high or the leakage is the highest, the vacuum pressure will hardly become high, so you need to pay attention.

Interpretation of Time to Vacuum

This reflects the time it takes for a 1L airtight tank to reach vacuum pressure determined by the adsorption conditions such as the workpiece from atmospheric pressure. In the case of EZL3H, it takes approximately 4.0 seconds to reach the vacuum pressure – 90kPa.

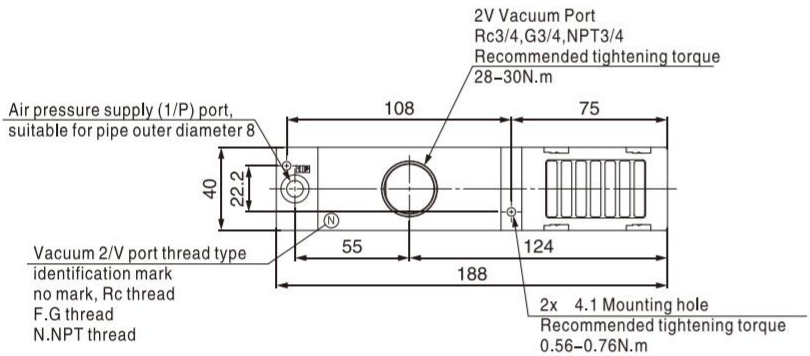
Main Dimension

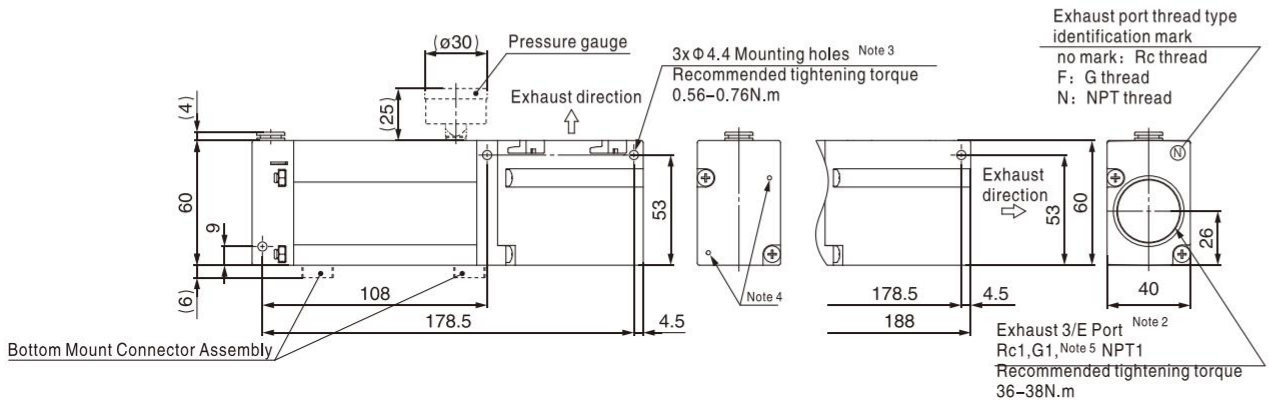
EZL3□□□□–□□–□ Valve (Blank supply valve and release valve)



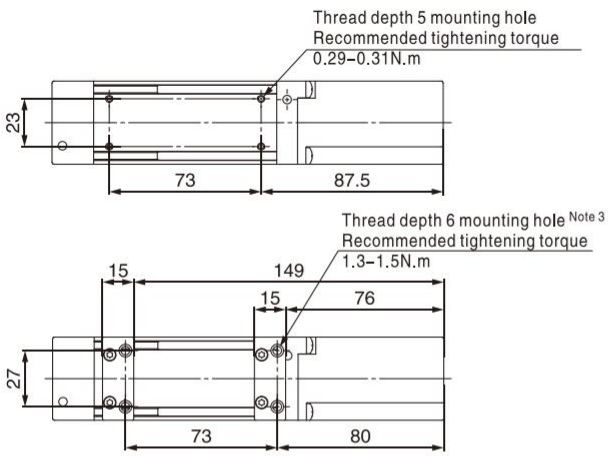
Main Dimension

EZL3□□□□-□□-□ Valve (Blank supply valve and release valve)





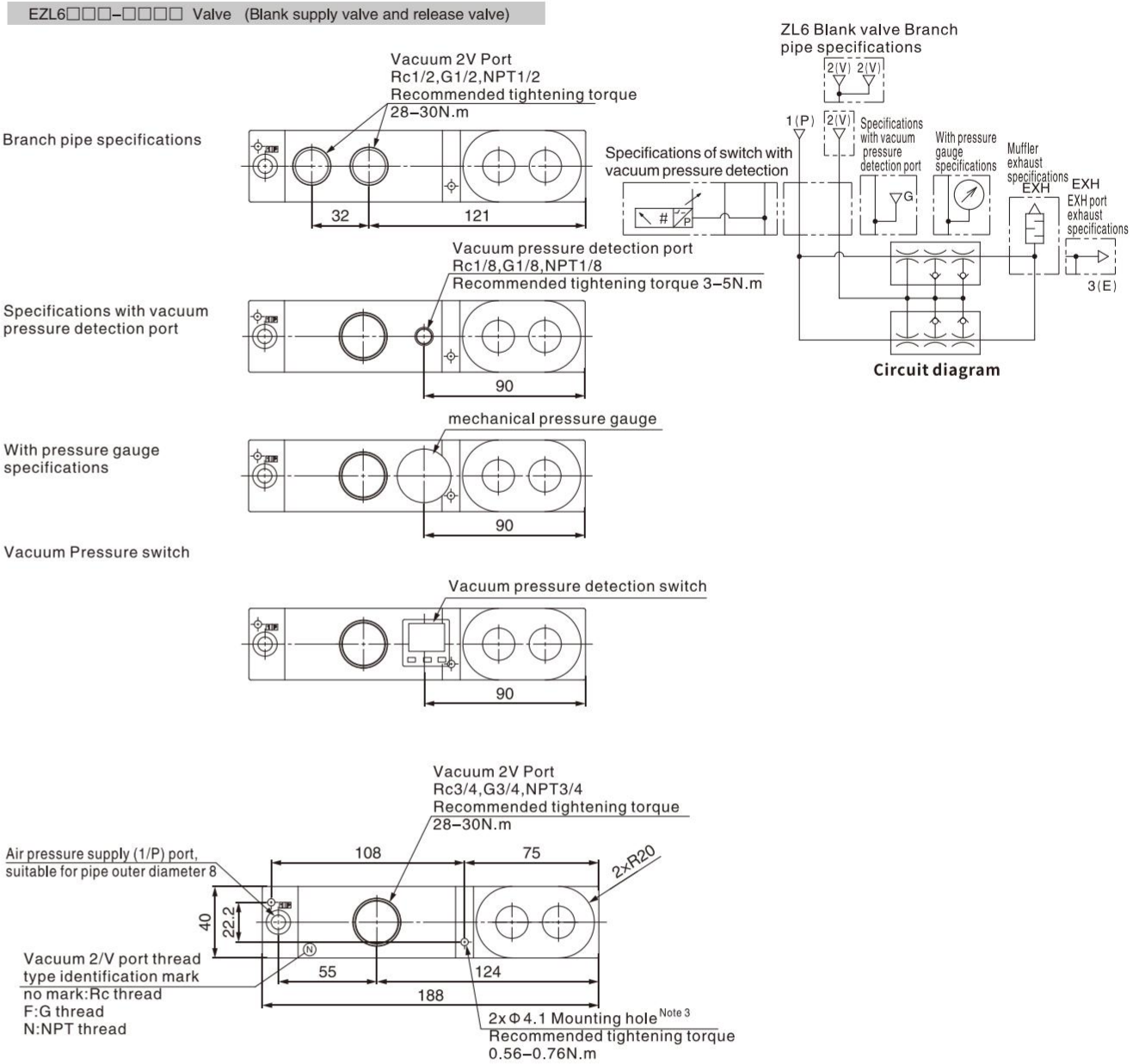
Occasions with vent exhaust specifications



Note 1) When piping the vacuum port and vacuum pressure detection port, please Fix the main body made of aluminum alloy before piping.
Note 2) When piping the exhaust port, fix the exhaust block instead of the product body.In addition, the inner diameter of the piping is recommended to be 21.7 or more.
Note 3) When installing the main body, please use the recommended tightening torque above. If so Tightening with excessive torque may damage the product.
Note 4) This hole is necessary for forming parts. Not the exhaust port.
Note 5) The thread shape complies with G thread (ISO228–1) standard, other shapes are not. Comply with ISO16030 and ISO1179 standards. Also, connect the vacuum port.The length of the external thread part of the piping should be kept below 10.5, and the exhaust port.The length of the external thread part of the piping should be kept below 11.5.

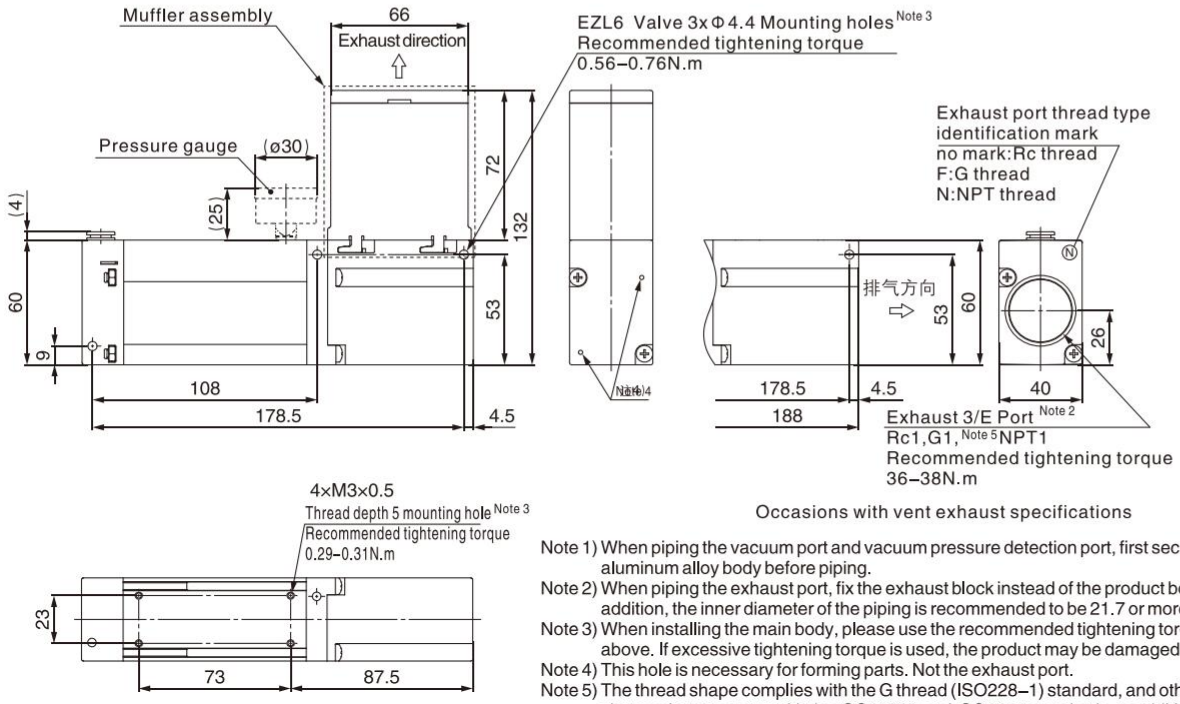
Main Dimension

EZL6□□□–□□□□ Valve (Blank supply valve and release valve)



Main Dimension

EZL6□□□□–□□ (Blank supply valve and release valve)

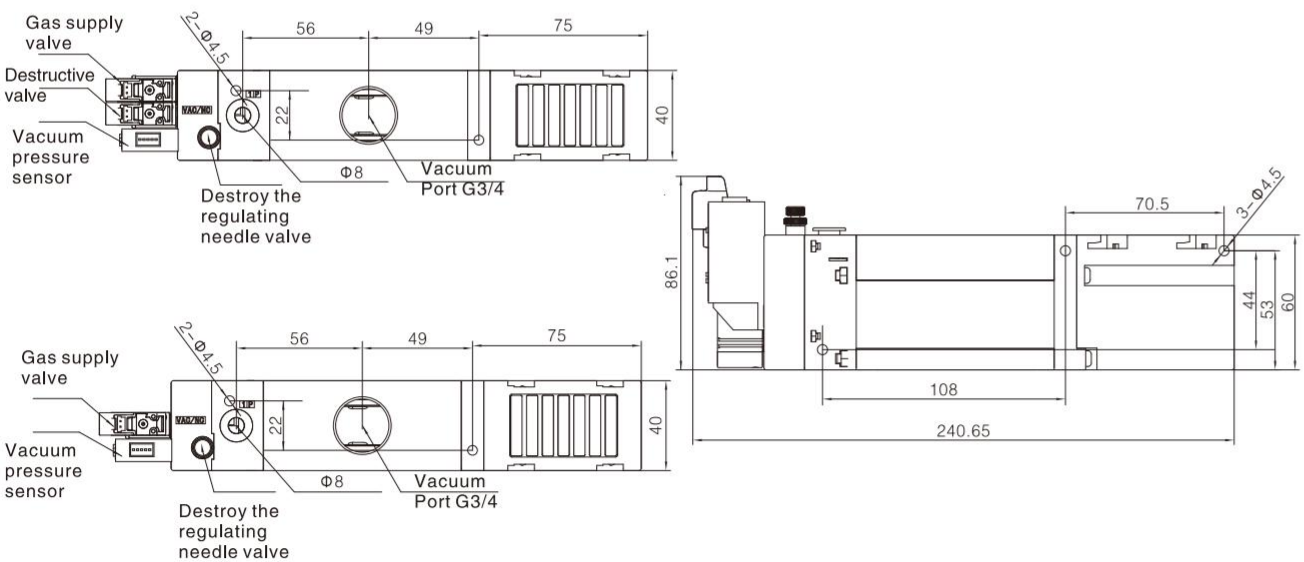


Occasions with vent exhaust specifications

Note 1) When piping the vacuum port and vacuum pressure detection port, first secure the aluminum alloy body before piping.
Note 2) When piping the exhaust port, fix the exhaust block instead of the product body. In addition, the inner diameter of the piping is recommended to be 21.7 or more.
Note 3) When installing the main body, please use the recommended tightening torque above. If excessive tightening torque is used, the product may be damaged.
Note 4) This hole is necessary for forming parts. Not the exhaust port.
Note 5) 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, the length of the male piping thread portion of the vacuum port is maintained at 10.5 or less, and the length of the male piping thread portion of the exhaust port is maintained at 11.5 or less.

EZL3□□□–$^{K15}_{K25}$MZ–D (Blank Supply valve and release valve,Vacuum Pressure Switch)

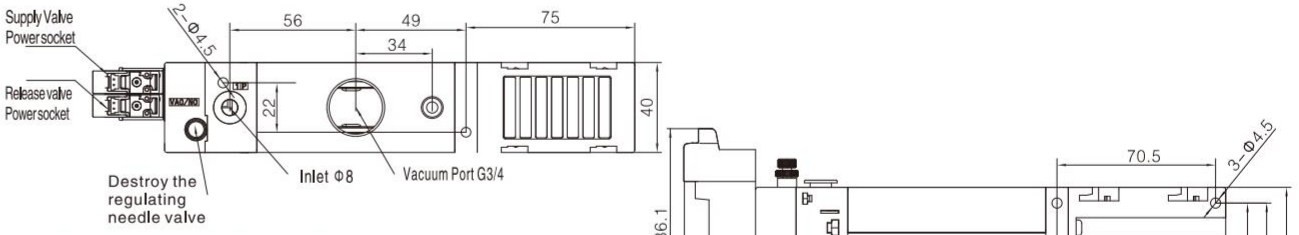
Supply valve and release valve,Vacuum Pressure Switch K15



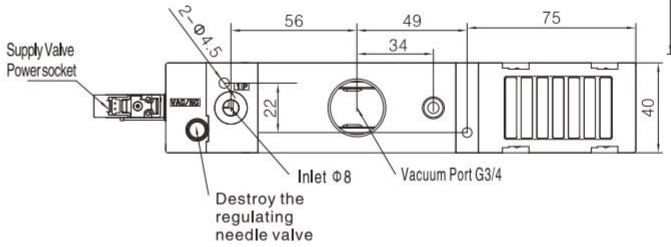
Main Dimension

EZL3□□□–$^{K15}_{K25}$LZ–GN(Blank Supply valve and release valve,Vacuum Pressure Switch)

Supply valve and release valve,Vacuum Pressure Switch K15

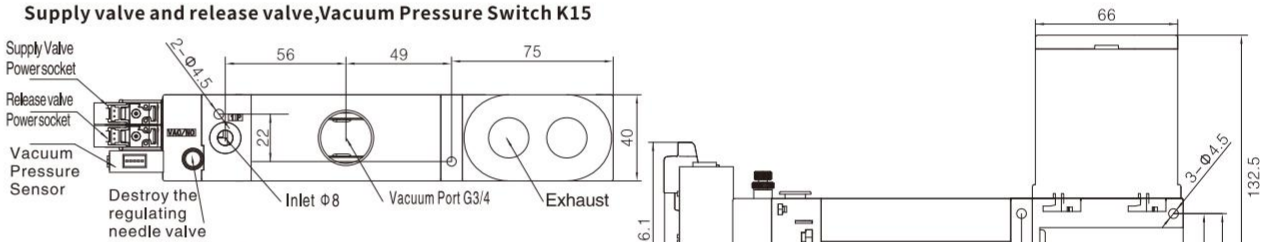


Supply valve ,Vacuum Pressure Switch K25

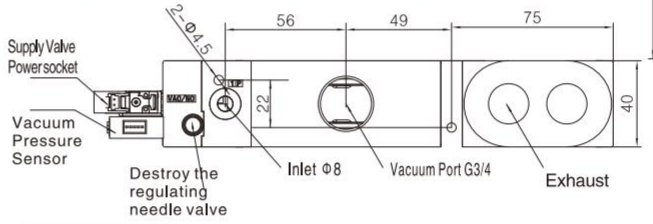


EZL6□□□–$^{K15}_{K25}$LZ–D(Blank Supply valve and release valve,Vacuum Pressure Switch)

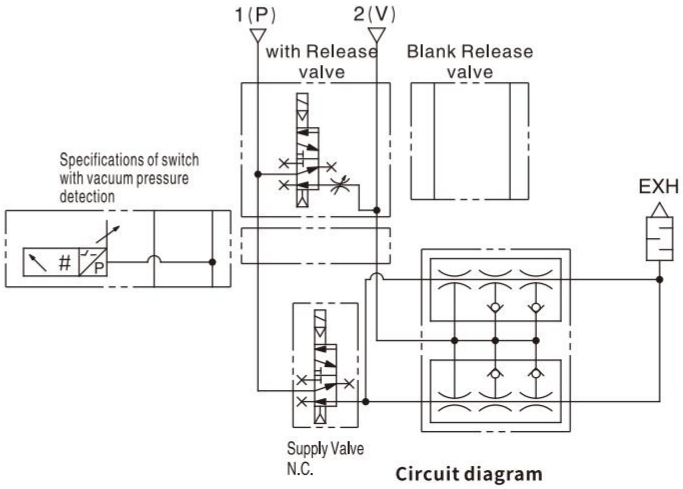
Supply valve and release valve,Vacuum Pressure Switch K15



Supply valve ,Vacuum Pressure Switch K25



EZL6 with Valve

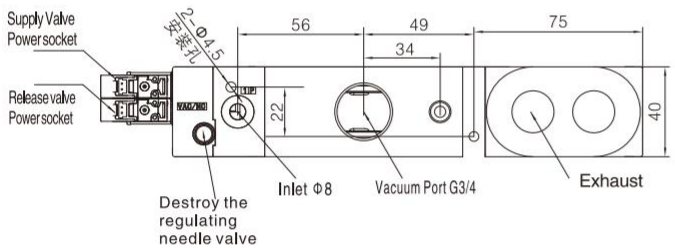


EZL6□□□–K25 MZ□–D□	With supply valve, vacuum pressure switch specifications
EZL6□□□–K25 MZ	With supply valve
PZL6□□□–K15 MZ	With supply valve, release valve specifications

Main Dimension

EZL6□□□-$\frac{K15}{K25}$LZ-GN□ (Blank Supply valve and release valve,Vacuum detection port)

Supply valve and release valve,Vacuum detection port(K15)



Supply valve ,Vacuum Pressure Switch K25