EZL3/EZL6 Multistage Vacuum Generator EZL 06 EZL3 Supply Valve and Vacuum Pressure Release Valve Switch Specifications EZL 04 EZL6 without Valve Exhaust Port Connecting pipe Vacuum pressure With vacuum pressure specifications gauge specifications Specifications detection port **How to Order?** Without Valve Series NO Suction Flow Pressure Outer Diameter of Supply (1/P) Port Vacuum Pressure Exhaust Output Specifications specifications Detection Part Outer Diameter of Supply (1/P) Port No Mark: Muffler exhaust N:NPN Open collector 1 Output M: 0.35MPa EZL: Multistage P:PNP Open collector 1 Output P:Rc1 Exhaust port Vacuum Generator H: 0.50MPa A:NPN Open collector 2 Output PF:G1 Exhaust port PN: NPT 1 B:PNP Open collector 2 Output 3: 300L/min(ANR) Blank:None Blank:None Mark 2/V Vacuum Port (1/P)supply port 6: 600L/min(ANR) GN: Vacuum pressure detection B:Bottom mount connector 06 Rc3/4 Note: When connecting assembly (ZL112A-AD1-A) port:(G)(Rc 1/8,G 1/8,NPT1/8) 2XRc1/2(Branch pipe specifications) pipes and exhausting G:Mechanical pressure gauge 8(Metric system) F06 D:Vacuum Pressure switch ports G3/4(1) 2XG1/2(1) (Branch pipe specifications) NPT3/4 N04 5/16" Imperial 2XNPT1/2(Branch pipe specifications) **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)_o 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 Maximum Standard Supply Vacuum (2/V) Port Size/Applicable Tube Exhaust ___ Supply valve, release Rated Wire Lead — Indicator Light and Overvoltage ___ Vacuum Pressure Output ___ Outer Diameter Of Supply (1/P) Port Specifications ___ valve combination Voltage Out Mthod Protection Circuit ___ Detection Part Specifications ___ _ Blank:None M: 0.35MPa 5:DC24V EZL: No Mark: Muffler exhaust GN: Vacuum pressure detection H: 0.50MPa Multistage P:Rc1 Exhaust port port:(G)(Rc 1/8,G 1/8,NPT1/8) Vacuum PF:G1 Exhaust port G:Mechanical pressure gauge Generator PN: NPT 1 D: Vacuum Pressure switch K1:Supply Valve(N.C.), Release Valve(N.C.) (2) Z:Non-locking push N:NPN Open collector 1 Output 3: 300L/min(ANR) 6: 600L/min(ANR) K2:Supply Valve(N.C.) type with indicator P:PNP Open collector 1 Output B1:Supply Valve(N.O.), Release Valve(N.C.) light and overvoltage Note: When connecting pipes A:NPN Open collector 2 Output and exhausting ports B2:Supply Valve(N.O.) protection circuit B:PNP Open collector 2 Output Mark 2/V Vacuum Port Code M type Plug (1/P)supply port Blank:None 06 Rc3/4 L:with Wire B:Bottom mount (Length 300mm)_ 2XRc1/2(Branch pipe specifications) connector assembly 8(Metric system) F06 G3/4(1) (ZL112A-AD1-A)N06 2XG1/21 (Branch pipe specifications) Mounting holes on top and **Bottom Mount** side are interchangeable Connector Assembly I_N04 | NPT3/4 5/16" Imperial even without options 2xNPT1/2(Branch pipe specifications) 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

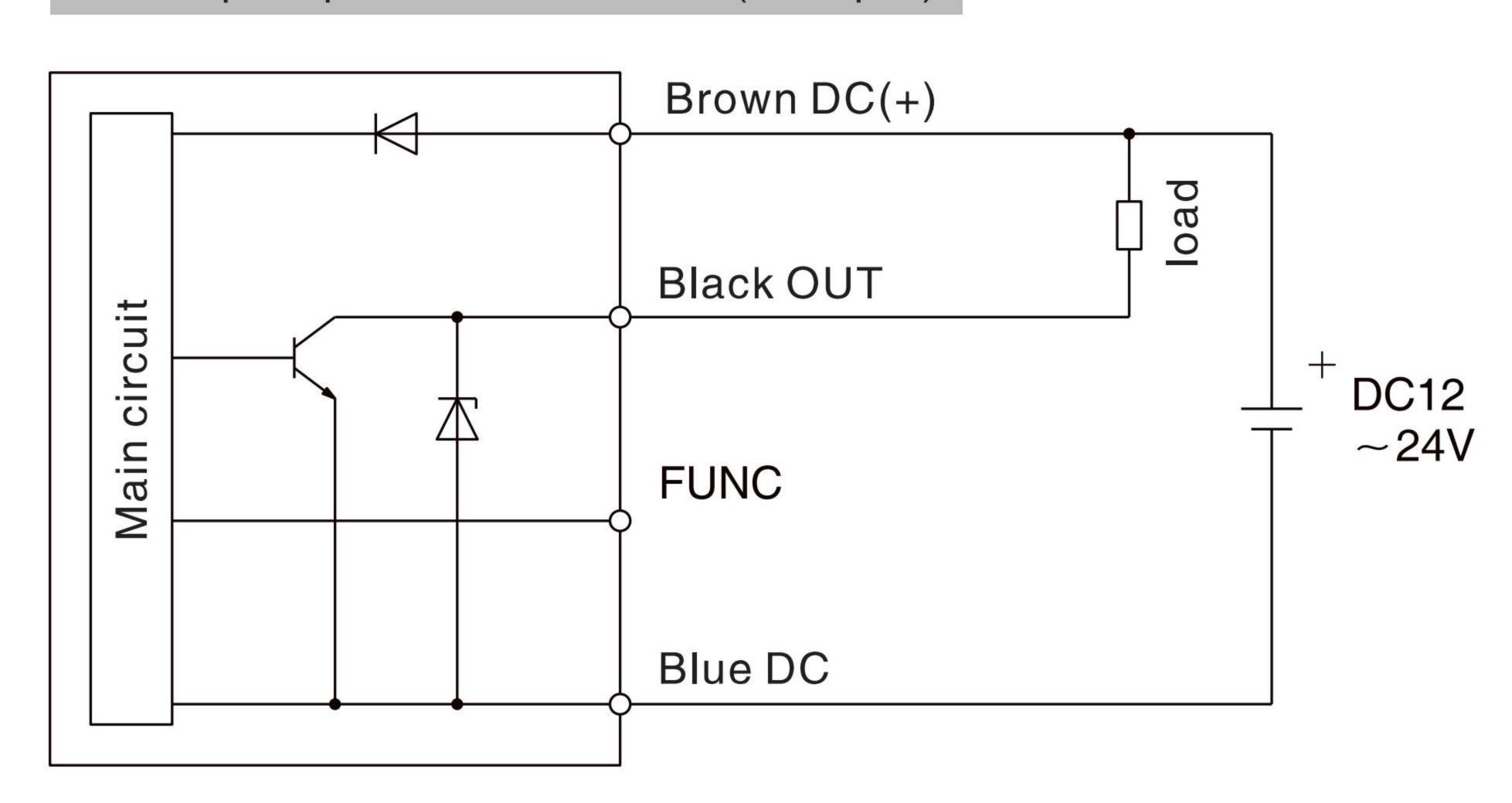


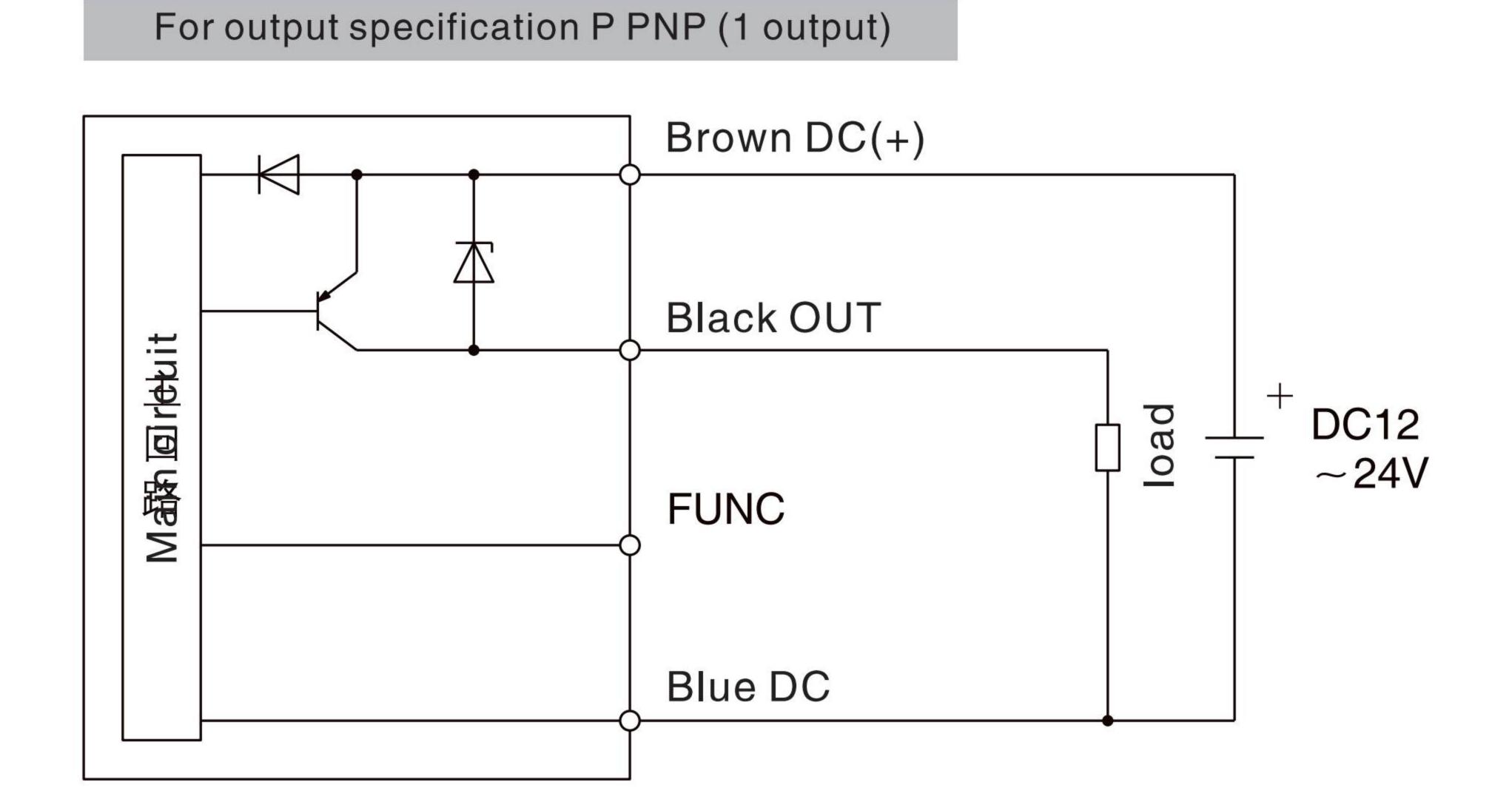
Specifications

Model	EZL3M	EZL3H 🗆	EZL6M 🗆	EZL6H 🗆
Nozzle diameter [mm]	1.9	1.5	1.9X2	1.5X2
Supply Pressure without Valve	0.35	0.50	0.35	0.50
[MPa] 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/s²]	20			
Impact resistance[m/s²]	100			
Exhaust noise [dB(A)]	68			

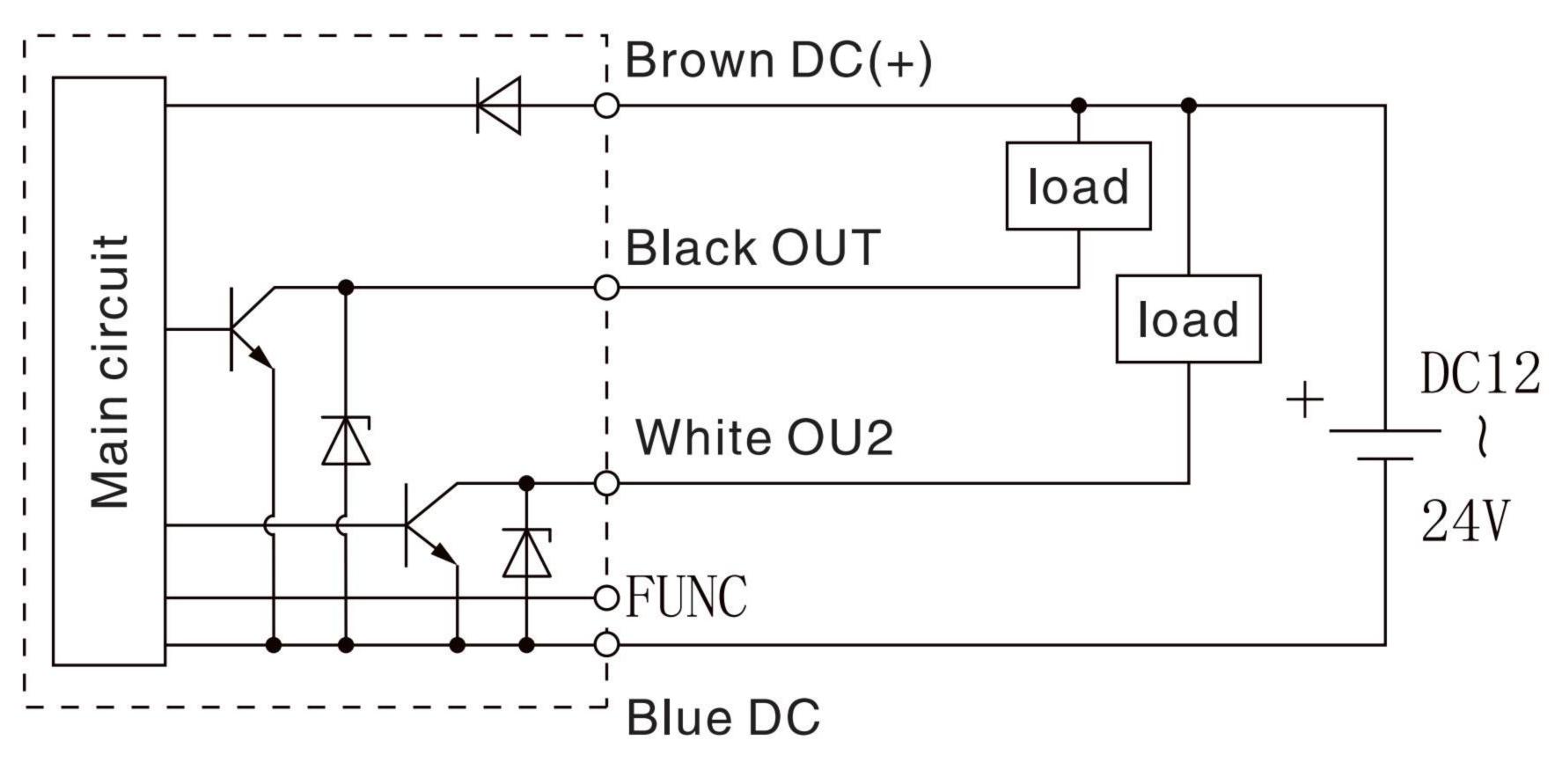
Onternal Circuit and Wring Example of Vacuum Pressure Switch

For output specification N NPN (1 output)





For output specification A NPN (2 output)



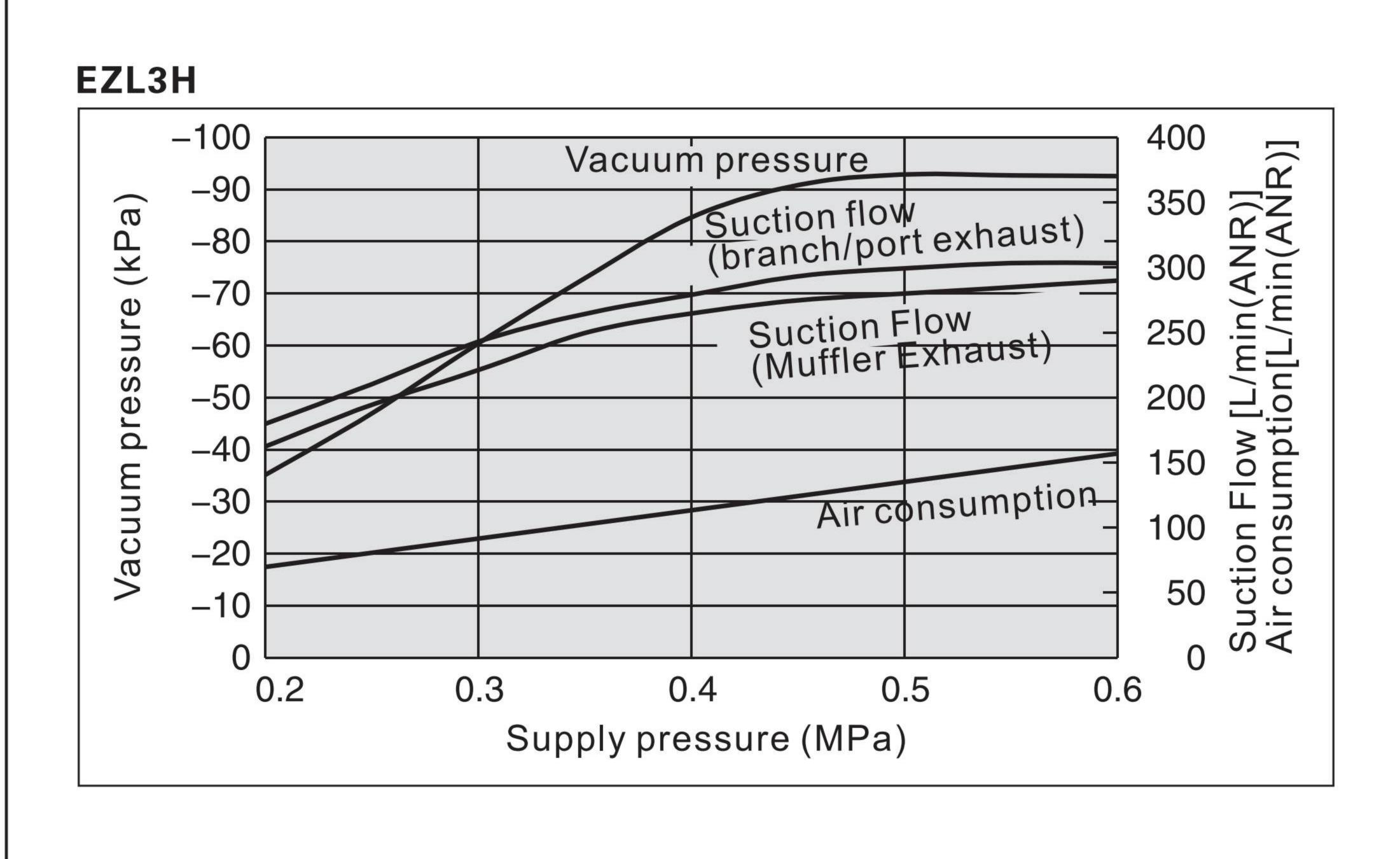
Max.28mA, 80mA Residual voltage below 2V

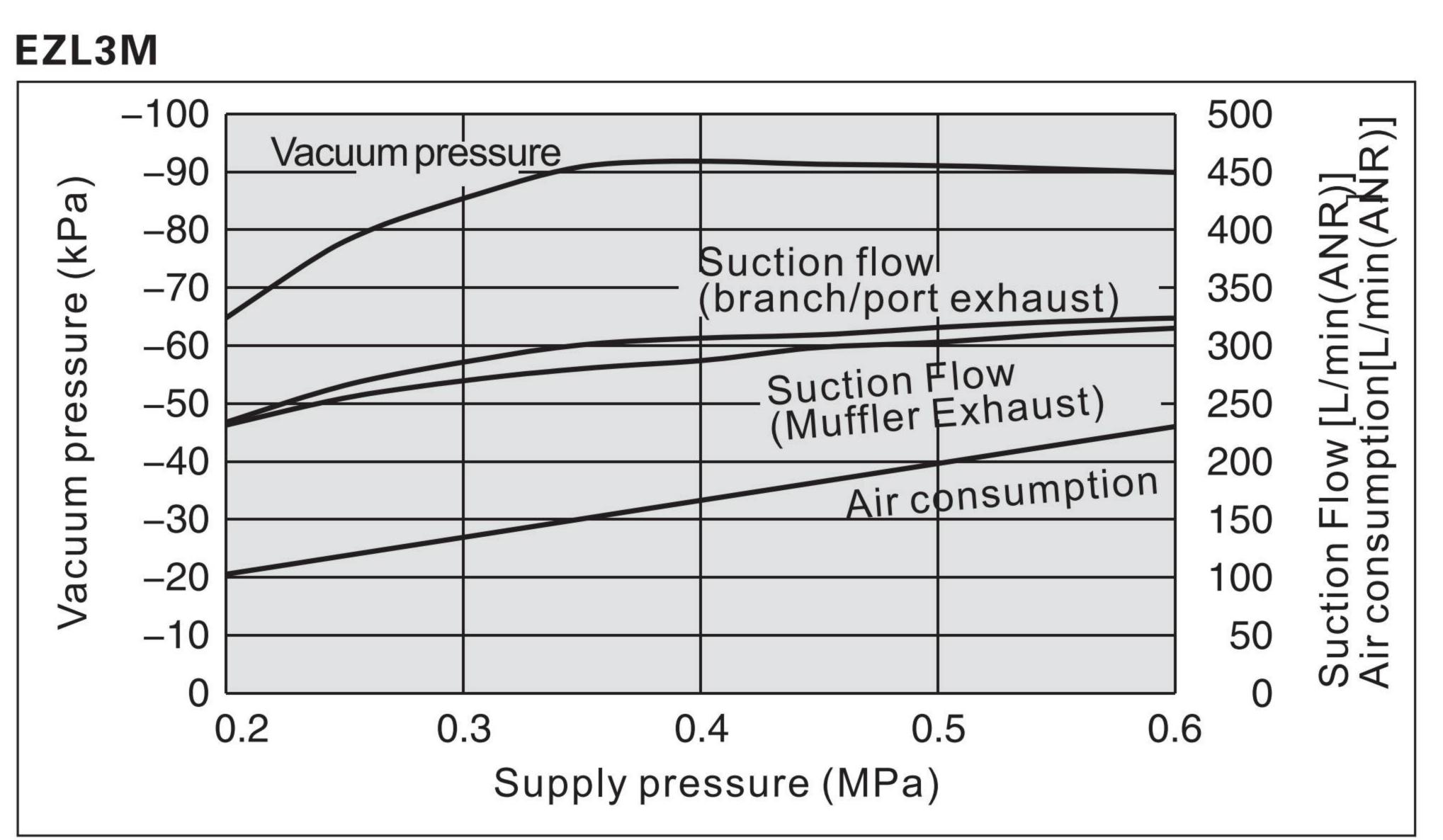
Brown DC(+) Black OUT White OU2 FUNC Blue DC

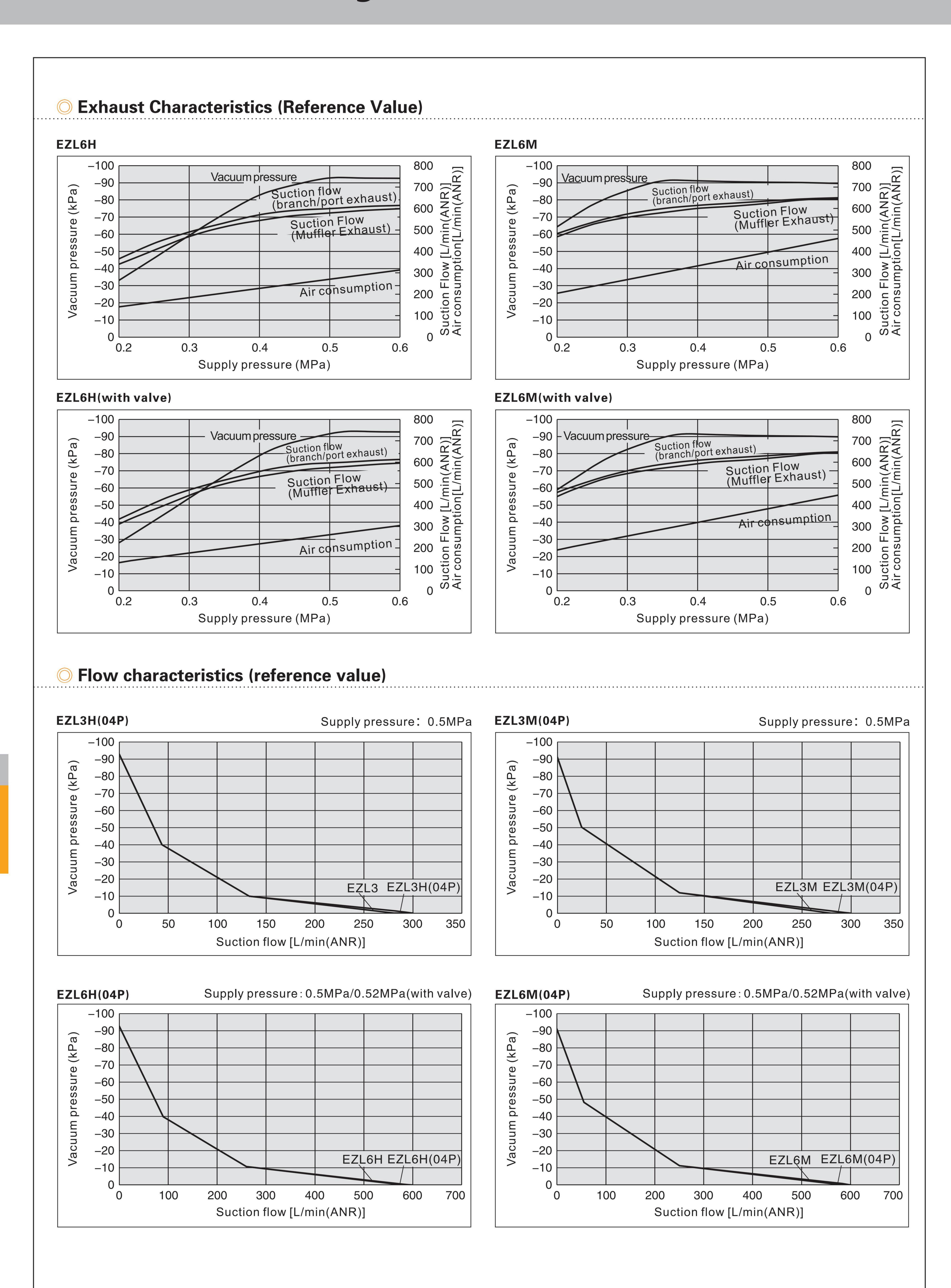
Max.28mA, 80mA Residual voltage below 2V

For output specification B PNP (2 output)

© Exhaust Characteristics (Reference Value)

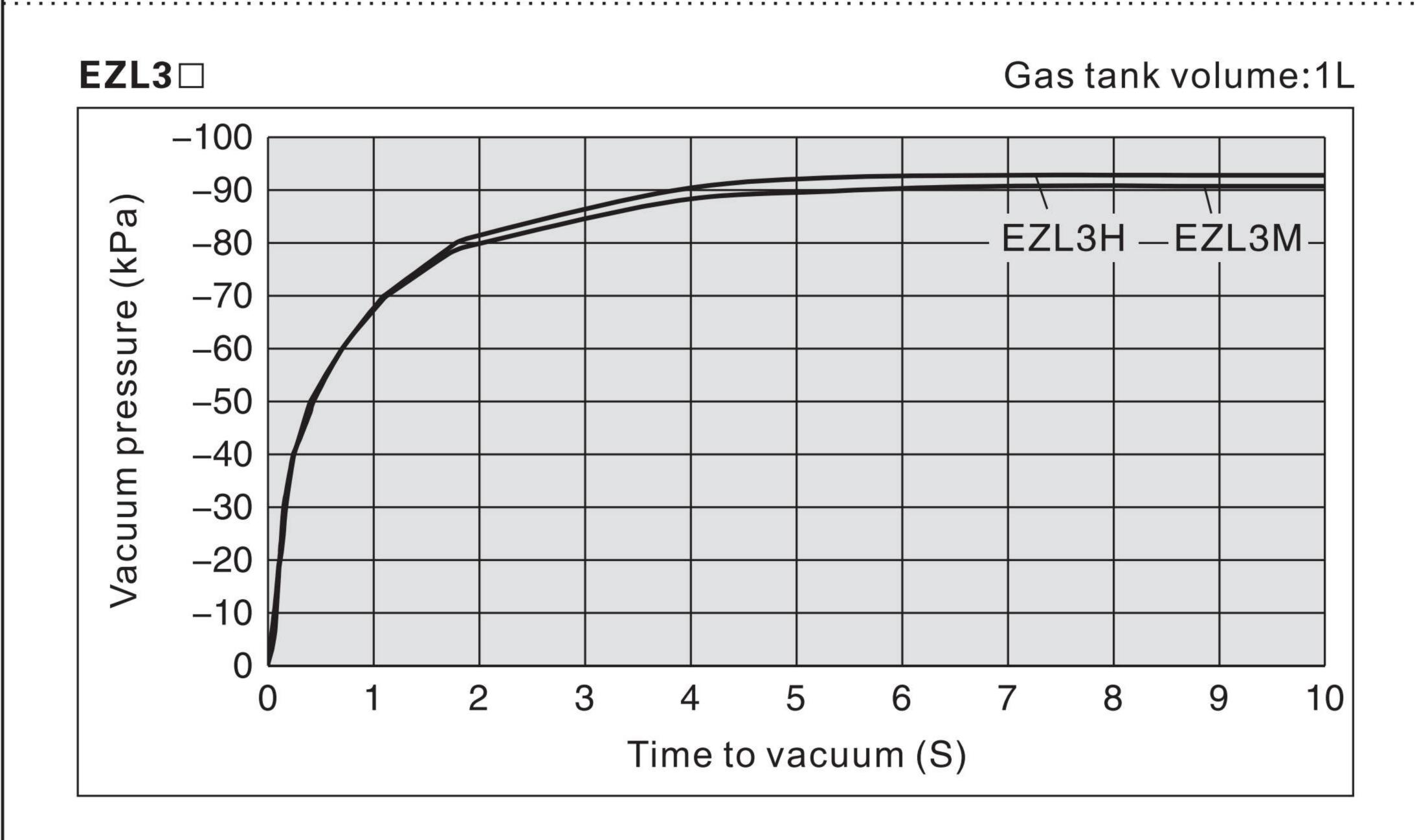


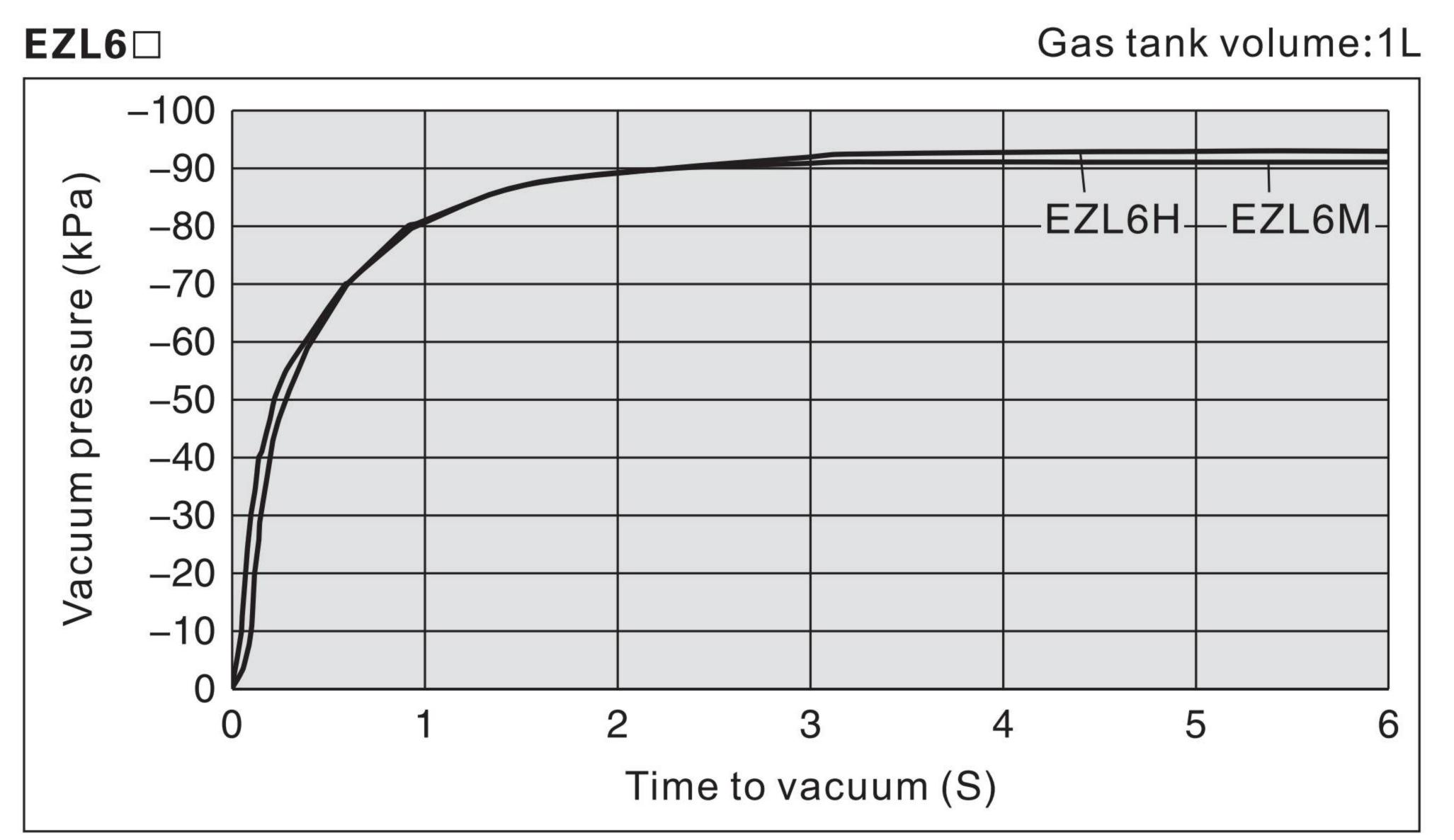




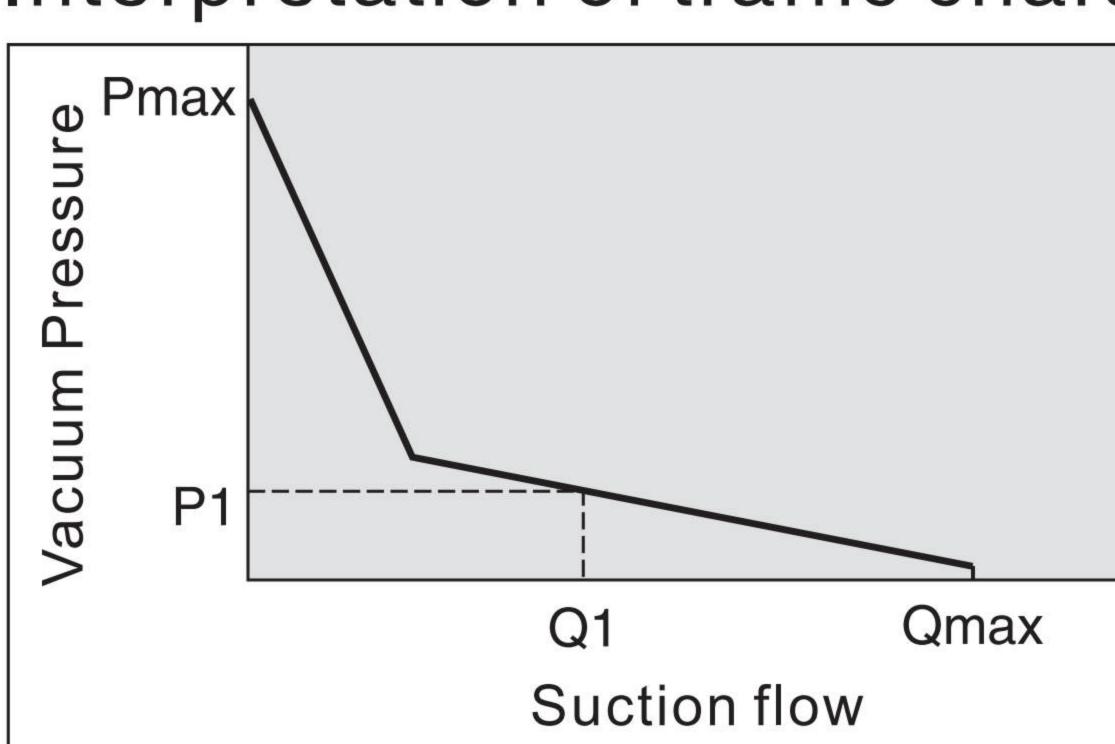


Flow Characteristics (Reference Value)





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).

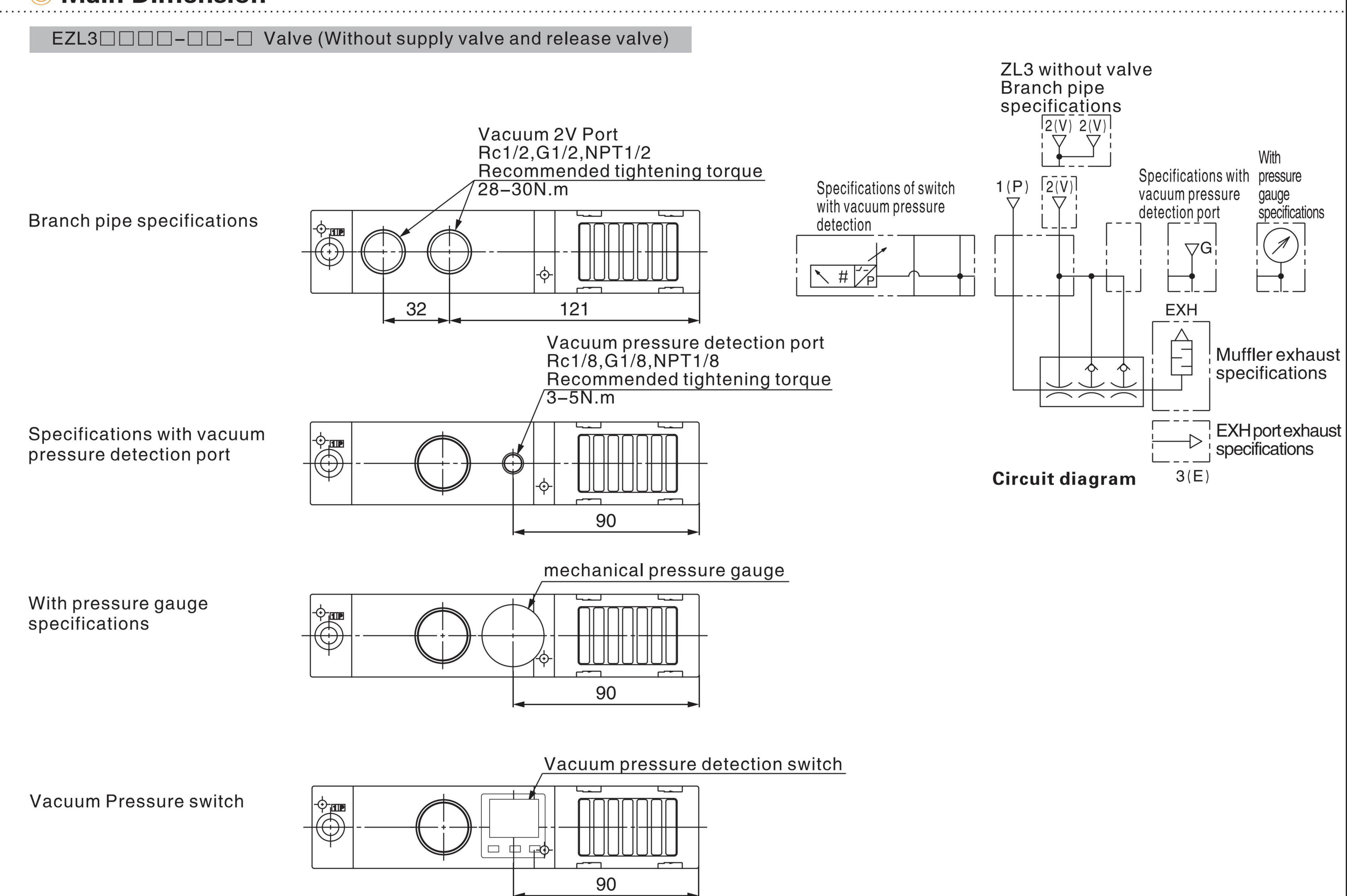
2:When the suction port is opened and air flows (air leakage), the suction flow rate increases and the vacuum pressure becomes lower. (Status of P1 and Q1)After opening the suction inlet fully, the suction flow rate becomes maximum (Qmax) and the vacuum pressure is almost 0

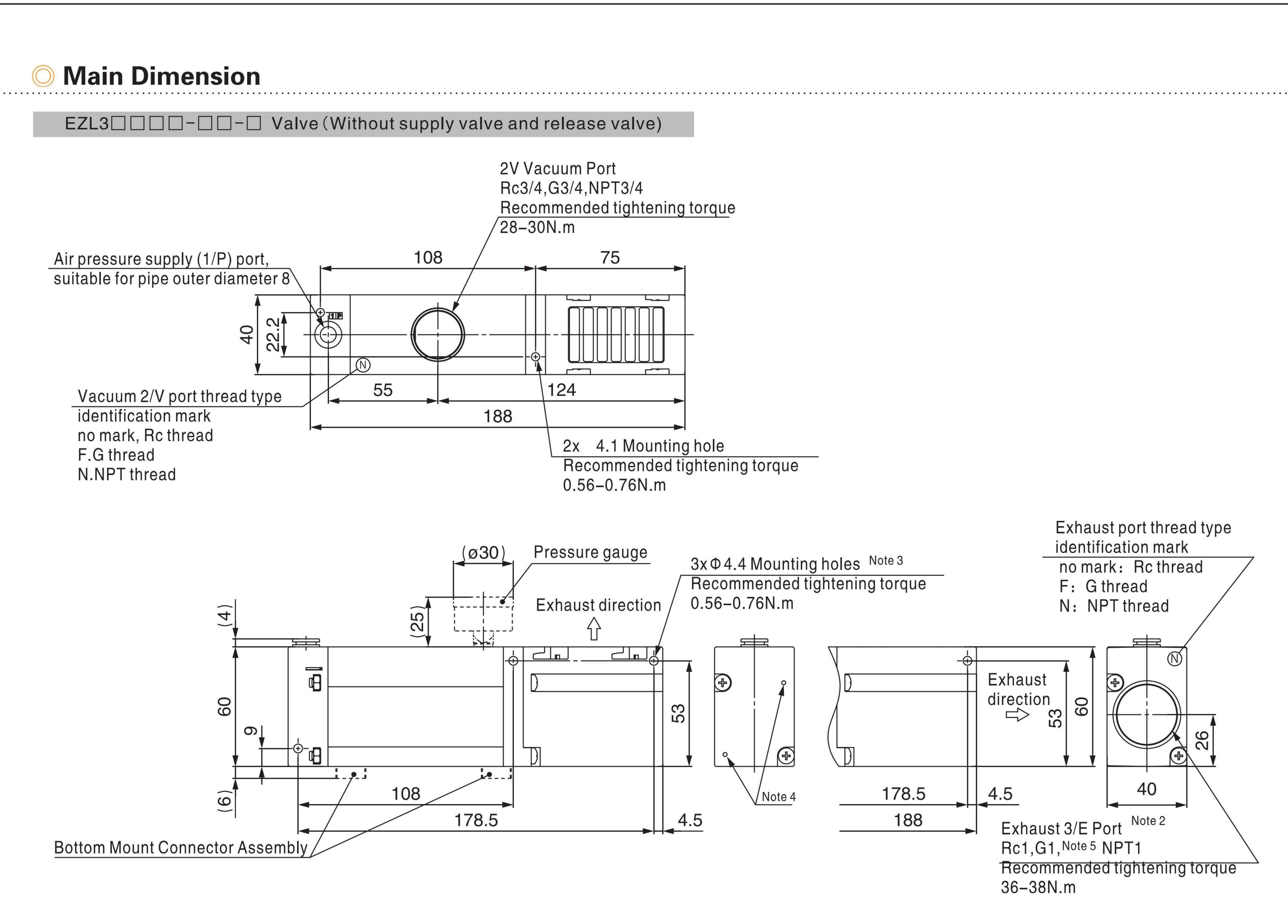
3: Gas-like adsorption When the air permeability is high or the leakage is the highest, the vacuum pressure will hardly become high, so you need to pay attention.

Interpretation of Time to Vacuum

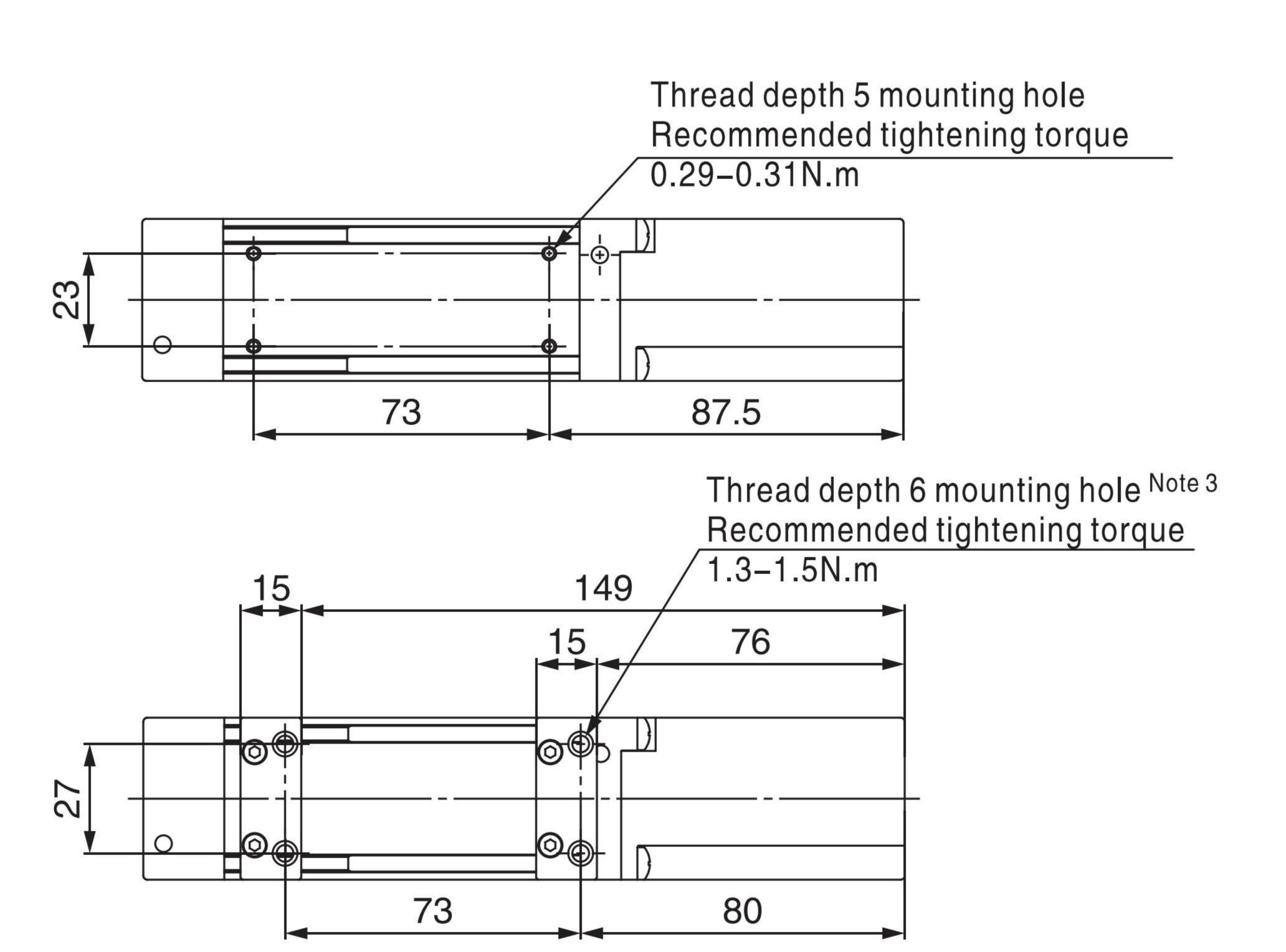
This reflects the time it takes for a 1L airtight tank to reach vacuum pressure determined by the adsorption conditions such as the workpiece from atmospheric pressure. In the case of EZL3H, it takes approximately 4.0 seconds to reach the vacuum pressure – 90kPa.

Main Dimension





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.



